Fall 2015 Undergraduate Calendar

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The Undergraduate Calendar is a comprehensive guide to all undergraduate programs and courses available at the University of Windsor. It outlines academic regulations and standards, program degree requirements, and general University policies for all undergraduate programs (with the exception of Law)

The online calendars are the official calendars. The University of Windsor publishes undergraduate web calendars on a semester basis (Fall, Winter, and Spring).

Note: Students may follow the academic rules and program regulations set out in the calendar of the term in which they were first admitted to the program or any subsequent calendar.

FEDERATED AND AFFILIATED INSTITUTIONS:
Assumption University
Canterbury College
Iona College

The University of Windsor is a full member of the Association of Universities and Colleges of Canada, and the
International Association of Universities.

GLOSSARY
This glossary explains some terms which are used frequently throughout this Calendar. It is intended as a quick-reference guide and may not necessarily offer the complete, official definitions and explanations as they are apply to the University's programs and the administration of its regulations.

Antirequisite - A course or other level of attainment which, if already successfully completed, does not permit registration for credit in another course, and which cannot be taken for credit concurrently with that other course.

Attempt - Generally, any course for which a final grade has been assigned, including "WF" - Withdrew Failing. Failures which are repeated and for which credit is subsequently earned may or may not be considered as attempts, depending upon individual faculty regulations. If a student transfers from one program to another, not all previous attempts necessarily will be counted as attempts within the student's new program.

Bachelor's Degree (Baccalaureate) - The first university degree, for which a student follows a specific undergraduate program (e.g., B.A.- Bachelor of Arts).

Certificate - At the undergraduate level, a program consisting of eight to twelve one-term course equivalents in a specialized area(s) of study.

Corequisite - A course which must be taken concurrently with another course which lists it as a corequisite.

Course - A unit of study identified by a course title and a unique course number. Unless otherwise specified, the term "course" refers to a one-term, 3.0 credit course offering.

Two-Term Course - A course taught over two terms, usually the Fall and Winter terms. A two-term course normally carries twice the credit value of a one-term course, or 6.0 credits.

Half Course - A course having a value of 1.5 credits. Half courses may be offered for fewer contact hours per week over an entire term, or may be concentrated in either the first or the second half of a term.

Credit - A unit of academic value earned within a particular program. A credit value of 3.0 normally is assigned to a one-term course. A two-term course, therefore, would have a credit value of 6.0; a half-course 1.5.

Other credit values may be assigned. Some courses may be taken for varying amounts of credit within a specific range (e.g. 2.0 to 9.0 credits); other courses

may be offered for alternate credit values (e.g., 3.0 or 6.0 credits).

Credit values are used in the calculation of averages for academic standing and in the determination of the student's year or level within a specific program. (See also "Weight").

Cross-Listed Courses - Courses which are listed under two different numbers in two different subject areas. Cross-listed courses may be taken in either subject area, but credit may be earned in only one course.

Cumulative Average - An average which is based upon all courses counted as attempts within a student's current program.

Diploma - At the undergraduate level, a program of study less extensive than a degree program, but requiring more courses than a certificate program.

Full-Time Student - A student who is registered in four or more undergraduate courses in a term.

Linked Courses - Credit may not be allocated to certain courses until a subsequent course is also successfully completed. Such "linking" of courses will be noted in the course descriptions.

Major - A formal, specific concentration of courses within a subject area as defined by its degree program(s).

Major Average - An average based upon courses attempted within the student's major as defined by the student's degree program.

Option - Generally, a non-major course not specifically required in a program, but for which credit may be earned towards the degree, certificate, or diploma offered in that program.

Specific restrictions may apply in some programs.

Part-Time Student - A student who is registered in less than four undergraduate courses in a term (i.e., less than 12.0 credits).

Prerequisite - A course for which credit must have been earned prior to registration in another course which lists it as a prerequisite. ("Consent of Instructor" may be listed as an alternative to, or in addition to a given course prerequisite.)

Program - A combination of courses in a subject area (or areas) which fulfills the requirements for a degree, certificate, or diploma.

Program Approval - For students in certain programs, consulting with and obtaining the signed approval of course selections by a faculty advisor may be required as part of the registration process.

Registration - The process of selecting courses, obtaining faculty approval for course selections where necessary, and making the appropriate arrangements with the University to pay the required fees.

Required Course - A course for which credit must be earned in a student's program.

Semester - Same as "Term" (see below).

Standing Required - Individual faculties and set out specific requirements which students must meet in order to continue in their programs. These requirements normally include the maintenance of specific minimum cumulative and major averages, and also place certain restrictions upon the number of courses a student is permitted to have failed. Progress is reviewed at the end of each term.

Term - An academic period of twelve to thirteen weeks' duration. The Fall term extends from September to December; the Winter term from January to April. Intersession, which extends for six weeks from mid-May through the end of June, and Summer Session, which extends from the beginning of July to mid-August are considered together as a single term.

Transcript - A document issued by the Office of the Registrar which records all aspects of a student's registrations and grades obtained at the University. An "official" transcript is one which bears the official seal of the University and which

is sent directly to another institution or official of an organization. "Unofficial" transcripts also may be issued to the student.

Withdrawal - A formal procedure set out within the regulations of the University for withdrawing from an individual course(s), or from the University entirely.

Weight - For students registered in the Faculty of Engineering, the calculation of averages is based upon a weighting factor. The weight of an individual course is equal to the number of lecture hours per week, plus one-half of the number of laboratory and/or tutorial hours per week.

Year (or Semester) - Attaining a particular Year or Semester level depends upon earning credit for a specific number of courses. The number of courses normally taken in one term/semester determines the Semester level; the number of courses normally taken in a program over both the Fall and Winter terms of a "regular" academic year would determine the Year level. In some programs, the attainment of a specific level also may reflect the earning of credits in a particular group or sequence of courses.

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FOR STUDENTS FROM ALL COLLEGES OF APPLIED ARTS AND TECHNOLOGY (CAAT)

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FANSHAWE COLLEGE OF APPLIED ARTS AND TECHNOLOGY
GEORGE BROWN COLLEGE OF APPLIED ARTS AND TECHNOLOGY
GEORGIAN COLLEGE OF APPLIED ARTS AND TECHNOLOGY
HUMBER COLLEGE INSTITUTE OF TECHNOLOGY AND HIGHER LEARNING
LAMBTON COLLEGE OF APPLIED ARTS AND TECHNOLOGY
MOHAWK COLLEGE OF APPLIED ARTS AND TECHNOLOGY
ST. CLAIR COLLEGE OF APPLIED ARTS AND TECHNOLOGY
SENECA COLLEGE
SHERIDAN COLLEGE INSTITUTE OF TECHNOLOGY AND ADVANCED LEARNING
SIR SANDFORD FLEMING COLLEGE OF APPLIED ARTS AND TECHNOLOGY
UNIVERSITY - TO - COLLEGE AGREEMENTS WITH ST. CLAIR COLLEGE OF APPLIED ARTS AND TECHNOLOGY
FORMAL UNIVERSITY/COLLEGE AGREEMENTS WITH OTHER INSTITUTIONS (in Ontario, Brunei, China, Egypt, Hong Kong, United States, Malaysia, Singapore, India)

ADMISSION REQUIREMENTS FOR TRANSFER STUDENTS (including from a College of Applied Arts and Technology, from Another University, from Lambton College's International Foundation Year, Academic Transfer Credit – Courses)

CANADIAN COLLEGES AND RECOGNIZED UNIVERSITIES
Bachelor of Engineering Technology (BEngTech): Graduates from three-year diploma programs in Engineering Technology from Colleges of Applied Arts and Technology (CAATs) or comparable degrees from other provinces, and individuals with a degree in a technical/science area from a recognized university who are seeking technology designation are eligible to apply to the Bachelor of Engineering Technology program. Applicants with university degrees may be eligible to receive up to four courses of advanced standings upon admission. (For more details click BEngTech)

FOR STUDENTS FROM ALL COLLEGES OF APPLIED ARTS AND TECHNOLOGY

From a College of Applied Arts and Technology: Applicants who have completed a minimum of one year of a CAAT diploma program that is academic in nature with a minimum cumulative average of B (3.0) at the CAAT will be considered for admission to First Year of an appropriate program. Applicants who have graduated from a three-year CAAT program that is academic in nature with a minimum cumulative average of B (3.0) at the CAAT will be considered for admission to Second Year of an appropriate program.

1) Business Programs (Three Year Diploma): Students may enter the Honours Business Administration program after completing a three-year College business diploma program with a minimum cumulative average of B- or better and a minimum grade of B- in each transferable course or minimum cumulative average of B- for each grouping of transferrable courses and in the case of one to one transfers of specified 3rd and 4th years courses, an A- average. Such graduates may be granted up to twenty semester course credits towards the Bachelor of Commerce - Honours Business Administration degree.

2) Business Programs (Two Year Diploma): Graduates of two-year diploma programs in business from any College of Applied Arts and Technology with a cumulative average of B- may transfer to the Odette School of Business Administration at the University of Windsor subject to the following:
(a)Applicants will be granted a maximum of two terms' credit towards the Bachelor of Commerce program.
(b)A remedial course in mathematics may be necessary in order for transfer students to pursue the first-year Mathematics course required in the Bachelor of Commerce program.

3) General Arts and Science Diploma and Liberal Arts and Science Diploma programs (Two Year Diploma): Graduates of General Arts and Science diploma programs, Liberal Arts and Science diploma programs, and equivalent diploma programs may receive transfer credit for up to ten courses. Transfer credit is awarded for approved courses with a minimum grade of B (3.0). Refer to the Faculty of Arts, Humanities and Social Sciences for current approved course lists.

4) Computer Science or Computer Programming or Information Technology (Three Year Diploma): Graduates of a three-year Computer Science or Computer Programming or Information Technology Diploma program from a college of applied Arts and Technology (CAAT), that is broadly equivalent to the three-year Diploma program T861 (Computer Systems Technology – Networking) offered by St. Clair College of Applied Arts and Technology at Windsor, Ontario, with a grade-point average of at least 3.0 out of 4.0 (or a cumulative average of at least a B grade), are eligible, within 10 years of graduation, for admission to Bachelor of Computer Science (General) degree program offered by the School of Computer Science at the University of Windsor under the provisions of this agreement. Graduates of CAAT program, specified above, applying to the University of Windsor for the Bachelor of Computer Science (General) Degree Program more than 10 years after completing the Diploma Program, with a grade point average of at least 3.0 out of 4.0 (or a cumulative average of at least a B), will require the approval of the Director of the School of Computer Science. In addition to the appropriate three-year Diploma and grade point average, applicants to the Bachelor of Computer Science (General) Degree Completion Program are required to have successfully completed Grade 12U Advanced Functions. The successful completion of Grade 12U Calculus and Vectors is strongly recommended. Students admitted to the Bachelor of Computer Science (General) Degree Completion Program will obtain the equivalent of 1.5 years of Advanced Standing (or awarded 15 course transfers). Additional credit for courses taken toward the CAAT Diploma will not be permitted. Students are required to complete fifteen (15) courses at the University of Windsor in fulfillment of the requirements of the Bachelor of Computer Science (General) Degree Completion Program. (Please refer to the **Bachelor of Computer Science (General)or Bachelor of Computer Science (Honours Applied Computing) degree programs** for more details.)

5) Bachelor of Computer Science (General) and (Honours Applied Computing) (Co-op) for Qualifying Ontario CAAT (or equivalent) Students with 2 Years of Study at CAAT (or equivalent) diploma program

6) Diploma in Protection, Security and Investigation (formerly Law and Security) (Two Year Diploma): Graduates of the two-year Diploma in **Protection, Security and Investigation** program with a cumulative average grade of B or better may receive credit equivalent to five courses (15.00 credits) toward a B.A. or B.S.W. degree. Transfer credit is awarded for approved courses with a minimum grade of B- or better.

7) Child and Youth Care (formerly Child and Youth Worker), **Developmental Services Worker, Early Childhood Education, Educational Support, Social Services Worker:** Graduates of these College of Applied Arts and Technology diploma programs with an overall B average or better may be admitted into second year of the Disability Studies program. Graduates of related Education, Community and Social Services programs may be admitted with Disability Studies Program Coordinator (or their designate) approval. (Please refer to the **BA Honours in Disability Studies for College of Applied Arts and Technology Graduates** for more details)

8) Labour Studies Degree Completion Programs:
General Labour Studies program for Graduates from College of Applied Arts and Technology who have completed a Business Administration diploma
Honours Labour Studies program for Graduates from College of Applied Arts and Technology who have completed a Business Administration diploma *(Note: As of Fall 2013, there are no new admissions to this program)*
General Labour Studies (with Human Resources Certificate from a College of Applied Arts and Technology)
Honours Labour Studies (with Human Resources Certificate from a College of Applied Arts and Technology) *(Note: As of Fall 2013, there are no new admissions to this program)*

9) Early Childhood Education Diploma: Students who have completed the Diploma in Early Childhood Education with an overall average of at least B (3.0) will normally receive a minimum of ten course equivalents toward a B.A. or B.S.W degree in the Faculty of Arts, Humanities and Social Sciences. Students will

receive credit on the basis of a General Approved Course List or for courses on a Specific Approved Course List that they passed with a minimum grade of C. Refer to the Faculty of Arts, Humanities and Social Sciences for approved course lists. Students must meet all regular requirements for the program they choose; the number of course credits applied toward program requirements will vary depending on program choice. Students whose Early Childhood Education diploma program includes transfer credits for previously completed university courses will normally receive a minimum of 10 university credits in accordance with the above provisions.

NB: Should changes in the courses offered or required at either institution necessitate changes to the specific courses mentioned in the agreement, with the agreement of the respective Deans' offices the list of course included in the agreement can be modified by the appropriate University of Windsor Department in consultation with the Registrar's office. The changes have to be submitted to the appropriate Faculty.

10) Developmental Services Worker Diploma: Graduates of the Developmental Services Worker program who have a cumulative grade point average equivalent to B (3.0) or better will normally receive credit equivalent to a minimum of ten courses toward a B.A. or B.S.W. degree in the Faculty of Arts, Humanities and Social Sciences. Students will receive credit on the basis of a General Approved Course List or for courses on a Specific Approved Course List that they passed with a minimum grade of C. Refer to the Faculty of Arts, Humanities and Social Sciences for approved course lists. Students must meet all regular requirements for the program they choose; the number of course credits applied toward program requirements will vary depending on program choice. Students whose Developmental Services Worker diploma program includes transfer credits for previously completed university courses will normally receive a minimum of 10 university credits in accordance with the above provisions.

NB: Should changes in the courses offered or required at either institution necessitate changes to the specific courses mentioned in the agreement, with the agreement of the respective Deans' offices the list of course included in the agreement can be modified by the appropriate University of Windsor Department in consultation with the Registrar's office. The changes have to be submitted to the appropriate Faculty.

11) Child and Youth Care (formerly Child and Youth Worker Diploma)**:** Students who have completed the Child and Youth Care Diploma program with a cumulative average grade of B (3.0) or better will normally receive a minimum of 15 university credits toward a B.A. or B.S.W. degree in the Faculty of Arts, Humanities and Social Sciences. Students will receive credit on the basis of a General Approved Course List or for courses on a Specific Approved Course List that they passed with a minimum grade of C. Refer to the Faculty of Arts, Humanities and Social Sciences for approved course lists. Students must meet all regular requirements for the program they choose;-the number of course credits applied toward program requirements will vary depending on program choice. Students whose Child and Youth Care diploma program includes transfer credits for previously completed university courses will normally receive a minimum of 15 university credits in accordance with the above provisions.

NB: Should changes in the courses offered or required at either institution necessitate changes to the specific courses mentioned in the agreement, with the agreement of the respective Deans' offices the list of course included in the agreement can be modified by the appropriate University of Windsor Department in consultation with the Registrar's office. The changes have to be submitted to the appropriate Faculty.

12) Child and Youth Care Diploma (formerly Child and Youth Worker Diploma)**:** Graduates of all Ontario College Child and Youth Care diploma programs completed in 1996 or later with a cumulative average equivalent to a B (73%) or better will be eligible for entry into Disability Studies and Psychology **Degree Completion Programs for CYC Graduates** and are eligible to apply for entry into the Honours Bachelor of Social Work for CYC Graduates. Completion of these programs will normally require three semesters of full-time study (for General BA degree completion programs) or four semesters of full-time study (for Honours BA and BSW degree completion programs). Students may enroll in these programs in Summer, Fall or Winter semesters. Students are strongly advised to consult with a Disability Studies, Psychology or Social Work academic advisor before registering for courses in these programs. (Disability Studies Degree Complete Program for CYC Graduates; Psychology Degree Complete Program for CYC Graduates; Social Work Degree Complete Program for CYC Graduates)

13) Social Service Worker Diploma: Students who have completed a Social Service Worker Diploma program recognized by and making them eligible for registration with the Ontario College of Social Workers and Social Service Workers with a cumulative average grade of B (3.0 or 70%) or better will normally receive a minimum of 10 university credits toward a B.A. degree or B.S.W. degree in the Faculty of Arts, Humanities and Social Sciences. Students will receive credit on the basis of a General Approved Course List or for courses on a Specific Approved Course List that they passed with a minimum grade of C (or 63%). Refer to the Faculty of Arts, Humanities and Social Sciences for approved course lists. Students must meet all regular requirements for the program they choose; the number of course credits applied toward program requirements will vary depending on program choice. Students whose Social Service Worker diploma program includes transfer credits for previously completed university courses will normally receive a minimum of 10 university credits in accordance with the above provisions.

NB: Should changes in the courses offered or required at either institution necessitate changes to the specific courses mentioned in the agreement, with the agreement of the respective Deans' offices the list of course included in the agreement can be modified by the appropriate University of Windsor Department in consultation with the Registrar's office. The changes have to be submitted to the appropriate Faculty.

DURHAM COLLEGE

1) Human Kinetics Degree Completion Program:
Bachelor of Human Kinetics (Honours Kinesiology) with Sport Management Major for Graduates of Durham College's Sport Management Program

FANSHAWE COLLEGE OF APPLIED ARTS AND TECHNOLOGY

1) Fine Art Program: Graduates of Fanshawe College who have completed a three-year Fine Art program may apply for transfer into an appropriate level of the Honours Bachelor of Fine Arts (Visual Arts) program. Transfer students must satisfy University regulations for transfer from CAATs and meet the academic requirements and standards of the B.F.A. program. Completion of the B.F.A. program in Visual Arts will normally require four terms of academic work or the equivalent at the University of Windsor. For further information, contact Visual Arts.

2) Recreation and Leisure Services Program: Students who have completed the two-year Recreation and Leisure Services Diploma Program at Fanshawe College with a cumulative average grade of B may receive up to ten Kinesiology credits to be determined by the Faculty of Human Kinetics, provided they passed the respective college courses with a grade of B- or better.

GEORGE BROWN COLLEGE OF APPLIED ARTS AND TECHNOLOGY

1) Performing Arts Program: Graduates of the George Brown College three-year Diploma program in Performing Arts with a cumulative average of B may gain admission to the third year of the B.F.A. in Acting program. A letter of recommendation from the Coordinating Director of the George Brown Theatre Program and a successful placement audition are also required. Completion of the B.F.A. will normally require four semesters of full-time study. Students may be required to take courses at the first or second year level if their audition indicates a need for such courses. Students who graduated from George Brown two or more years prior to application to the University of Windsor are subject to a placement audition before they can be covered by this agreement.

GEORGIAN COLLEGE OF APPLIED ARTS AND TECHNOLOGY

1) Fine Arts Program: Graduates of the three-year Diploma program in Fine Arts with a cumulative average of 2.7 (B) may gain admission to the third year of the B.F.A. Visual Arts program. Two letters of recommendation, a letter of intent and a successful portfolio are also required.

HUMBER COLLEGE INSTITUTE OF TECHNOLOGY AND HIGHER LEARNING

1) Theatre Performance Program: Graduates of the Humber College three-year Diploma program in Theatre Performance with a cumulative average of B may gain admission to the third year of the B.F.A. Acting program. A letter of recommendation from the Artistic Director of the Humber College Theatre Performance program and a successful placement audition are also required.

Completion of the B.F.A. will normally require four semesters of full-time study. Students may be required to take courses at the first or second year level if their audition indicates a need for such courses. Students who graduated from Humber College two or more years prior to application to the University of Windsor are subject to a placement audition before they can be covered by this agreement.

LAMBTON COLLEGE OF APPLIED ARTS AND TECHNOLOGY

Note: Lambton College students who have completed Lambton College Communications I (ENG 1113) will receive transfer credit for University of Windsor Effective Writing I (01-01-150); and, Lambton College students who have completed Lambton College Communications II (ENG 2113) will receive transfer credit for University of Windsor Effective Writing II (01-01-151), on the understanding that transfer credits given for one or both of these courses will not increase the number of transfer credits to which they are entitled according to the articulation or degree completion agreement nor decrease the number of courses they must complete in order to earn a University of Windsor degree.

1) Chemical Engineering Technology Program: A student may enter a Bachelor of Science program after completing the three-year Diploma in Chemical Engineering Technology. Depending upon the selected level and area of study, the student may receive the equivalent of seventeen courses from Chemistry and Biochemistry.

2) Environmental Technology Program: A student may enter a Bachelor of Science program after completing the three-year Diploma in Environmental Technology. Depending upon the selected level and area of study, the student may receive the equivalent of nineteen courses from Chemistry and Biochemistry.

3) Medical Laboratory Science Program: Graduates of the three-year Diploma in Medical Laboratory Science with a 3.0 G.P.A. (75 percent or equivalent) may receive the equivalent of seventeen semester course credits towards the Bachelor of Science degree in Biological Sciences, Biochemistry, or General Science.

4) Industrial Hygiene Technology Program: A student may enter a Bachelor of Science program after completing the three-year Diploma in Industrial Hygiene Technology. Depending upon the selected level and area of study, the student may receive the equivalent of up to sixteen courses towards a Biological Sciences Degree, or up to twenty courses towards a Biochemistry degree.

5) Massage Therapy Program: A student may enter the Bachelor of Human Kinetics (Movement Sciences) program after completing the three-year Diploma in Massage Therapy with a minimum cumulative average equivalent to a B or better and a minimum cumulative grade of B or better for each college course or group of college courses for which transfer credit may be granted. Up to ten transfer credits may be given.

6) Police Foundations Program: A graduate of the two-year Diploma in Police Foundations program with a cumulative average grade of B or better and at least a grade of B- in specified College courses may receive up to one year (ten courses) of credit towards a B.A. or B.S.W. degree program in the Faculty of Arts, Humanities and Social Sciences.

7) Human Kinetics Degree Completion Program:
Bachelor of Human Kinetics (Honours Kinesiology) with Sport Management Major for Graduates of Lambton College's Sport and Recreation Administration program

8) Graduates of the One-Year Pre-Health Science-Nursing Program: A student with a minimum grade point average of 2.7 (B) and a minimum average of 2.7 (B) in BIO 120, BIO 220, CHM 125 and CHM 225, will be considered for admission to the B.Sc.N. program.

9) General Arts and Science Psychology Program: Students who have completed a two year high affinity General Arts and Science Psychology Stream diploma at Lambton College with a minimum cumulative average of 3.0 (Lambton College B) may enrol in any Bachelor of Arts or Bachelor of Social Work program offered at the University of Windsor. Students will receive the equivalent of up to 14 semester courses for all courses included in the Agreement on which they received a minimum average grade of 3.0) (Lambton College B).

10) Liberal and Professional Studies Degree Completion Programs
General Liberal and Professional Studies (for Lambton College General Arts and Science University (GASU) transfer students

Honours Liberal and Professional Studies (for Lambton College General Arts and Science University (GASU) transfer students)

MOHAWK COLLEGE OF APPLIED ARTS AND TECHNOLOGY

1) Medical Laboratory Science Program: Graduates of the three-year Diploma in Medical Laboratory Technology with a 3.0 G.P.A. (75% or equivalent) may receive the equivalent of seventeen semester course credits towards the Bachelor of Science degree in Biological Sciences, Biochemistry, or General Science.

ST. CLAIR COLLEGE OF APPLIED ARTS AND TECHNOLOGY

Note: Applicants who have graduated from a St. Clair College of Applied Arts and Technology program for which a transfer agreement exists with the University of Windsor who have completed St. Clair College Foundations of Academic Writing I (FAW 100) and/or St. Clair College Foundations of Academic Writing II (FAW 105) will receive transfer credit for University of Windsor Effective Writing I (01-01-150) and/or University of Windsor Effective Writing II (01-01-151). These transfer credits will be included in the maximum number of transfer credits specified in the existing transfer agreement.

1) Diploma in Journalism and BA Communication, Media and Film : St. Clair College graduates of the Diploma in Journalism with a minimum B-(2.7) average who have successfully completed the St. Clair courses may receive up to 10 course credits toward the requirements of a BA (General or Honours) in Communication, Media, and Film, from the University of Windsor. Credit will be awarded only if the St. Clair course was completed with a grade of B- (2.7) or better.Transfer students have to fulfill the regular degree requirement for the General or Honours BA (single or combined) in Communication, Media, and Film, including the residency and senior course requirement.

2) Chemical Engineering Technology Program: A student may enter a Bachelor of Science program after completing the three year Diploma in Chemical Engineering Technology. Depending upon the selected level and area of study, the student may receive the equivalent of seventeen semester course credits from Chemistry and Biochemistry.

3) Medical Laboratory Science Program: Graduates of the three-year Diploma in Medical Laboratory Science with a 3.0 G.P.A. (75% or equivalent) may receive the equivalent of seventeen semester course credits towards the Bachelor of Science degree in Biological Sciences, Biochemistry, or General Science.

4) Business Administration Information Systems: Graduates of this program with a 3.0 G.P.A. or better, who have completed specific courses will be considered for admission to the General Bachelor of Computer Science on an individual basis, subject to the approval of the Dean of Science, and may receive up to fifteen semester course equivalents.

5) Mechanical Engineering Technology - Automotive Product Design Program: Graduates of the Mechanical Engineering Technology - Automotive Product Design program in the year 2001 or later, with a cumulative G.P.A. of B or better, with B grades in the fifteen core diploma program subjects, and with no grades below C on their College record, will be granted advanced standing in 14 semester courses towards the Bachelor of Applied Science in Mechanical Engineering (Automotive Engineering Option) degree. See department for list of courses.

6) One-Year Pre-Health Science - Nursing Program: Students at St. Clair College who successfully complete the one-year Pre-Health Science-Nursing certificate with a minimum overall grade point average of 2.7 (B) and a minimum science subject average of 2.7 (B) in GAS 11, GAS 21, GAS 11A and GAS 21A, will be considered for admission to the B.Sc.N. program.

7) Dental Hygiene Diploma: Students who have completed the two-year Diploma in Dental Hygiene with a cumulative average grade of B may receive up to five university credits for the following courses (or their equivalents), to apply toward any degree program in the Faculty of Arts, Humanities and Social Sciences, provided they passed the respective college courses with a grade of B- or better: Communication Across Cultures, Anatomy and Physiology II, Ethics and Professionalism, Basic Psychology, Three additional Dental Hygiene courses with a B average.

8) Police Foundations Program: A graduate of the two-year Diploma in Police

Foundations program with a cumulative average grade of B or better and at least a grade of B- in specified College courses may receive up to one year (ten courses) of credit towards a B.A. or B.S.W. degree program in the Faculty of Arts, Humanities and Social Sciences.

9) Civil Engineering Technology Program: Students who have completed the three-year Diploma Program at St. Clair College in Civil Engineering Technology with a cumulative average grade of B (70%) or better may receive credit for up to 16 specified semester courses provided they have passed the respective college courses with a grade of B (70%) or better.

10) Social Work and Disability Studies Degree Completion Programs

11) Psychology Degree Completion Programs

12) Chemical Laboratory Technology Program: Students who graduate from the Chemical Laboratory Technology Program with a cumulative GPA of (3.0) or better will be awarded seventeen (17) semester transfer credits towards the Bachelor of Science (Honours Chemistry and Honours Chemistry with Thesis), or awarded sixteen (16) credits towards the Bachelor of Science (Honours Biochemistry and Honours Biochemistry with Thesis).

SENECA COLLEGE

1) Liberal Arts Diploma (Two Year Diploma): Graduates of the two-year Liberal Arts diploma program from Seneca College may receive transfer credit for up to ten courses. Transfer credit is awarded for approved courses with a minimum grade of B.

SHERIDAN COLLEGE INSTITUTE OF TECHNOLOGY AND ADVANCED LEARNING

1) Craft and Design Program: Graduates of Sheridan College who have completed a three-year Craft and Design program may apply for transfer into an appropriate level of the Honours Bachelor of Fine Arts (Visual Arts) program. Transfer students must satisfy University regulations for transfer from CAATs and meet the academic requirements and standards of the B.F.A. program. Completion of the B.F.A. program in Visual Arts will normally require four terms of academic work or the equivalent at the University of Windsor. For further information, contact Visual Arts.

SIR SANDFORD FLEMING COLLEGE OF APPLIED ARTS AND TECHNOLOGY

1) One-Year General Arts and Science Program: Students who have completed the one-year certificate in General Arts and Science from Sir Sandford Fleming with a cumulative average grade of B may receive up to five university course credits, provided they passed the respective college courses with a grade of B- or better. The course credits received will be applicable to any BA/BSW program in the Faculty of Arts, Humanities and Social Sciences, and students would have to meet all regular requirements for the respective major of their choice.

UNIVERSITY - TO - COLLEGE AGREEMENTS WITH ST. CLAIR COLLEGE OF APPLIED ARTS AND TECHNOLOGY
University of Windsor graduates may obtain advanced standing into certain diploma programs offered by St. Clair College.

FORMAL UNIVERSITY/COLLEGE AGREEMENTS WITH OTHER INSTITUTIONS

ONTARIO

Academy Of Learning
Graduates of selected Academy of Learning diploma programs with a cumulative average of seventy-five percent or better may receive advanced standing (transfer credit) for specified courses in Computer Science and/or Business Administration provided that they qualify for admission under any of the policies listed under "Admission Requirements".

McMaster University
Students who have successfully completed the Labour Studies Certificate program will receive five 100-level unspecified course credits in the Faculty of Arts, Humanities and Social Science programs at the University of Windsor. Students will still have to qualify for admission to the University based on the normal

admission standards and students will be able to register in any program within the Faculty of Arts, Humanities and Social Science.

National Theatre School
Graduates of the National Theatre School three-year Certificate program in Acting may gain admission to the third year of the B.F.A. in Acting program. A letter of recommendation from the Head of the National Theatre School and a successful placement audition are required. Completion of the B.F.A. will normally require four semesters of full-time study. Students may be required to take certain academic courses, as well as performance courses at the first or second year level if their audition indicates a need for such courses. Students who graduated from the National Theatre School two or more years prior to application to the University of Windsor are subject to a placement audition before they can be covered by this agreement.

BRUNEI

University Brunei Darussalam (UBD)
Honours Biology and Biotechnology program: Students will be admitted into this program at UBD with three A-levels or equivalent in Chemistry, Biology, and Mathematics with grades of C, or higher. Students completing specified UBD courses with a cumulative average of C+ (65%) or higher and who have completed the University of Windsor course 03-59-263-91 (Distance Education version of Organic Chemistry of Biomolecules) with a grade of B- or higher, will be eligible for transfer directly into the third year of the Honours Biology and Biotechnology program at the University of Windsor. Students must meet the University of Windsor's English language competency requirements and admission requirements before enrolling in 03-59-263-91. Successful transfer students will be considered to have all the prerequisites necessary for continuation in the program, and will receive credit for nineteen specified University of Windsor courses.

CHINA

Anshan University of Science and Technology
Anshan will accept students into a program leading to a degree granted by that institution. This program will be designed so as to provide the Anshan students with the option of transferring to the University of Windsor, to complete 10 or more University of Windsor credits and to be granted a University of Windsor Bachelor of Arts (Economics) or Bachelor of Arts (Honours Economics).

Students who complete at least one year of an undergraduate program at Anshan University of Science and Technology, with a G.P.A. of 7.0 (C+) or its equivalent at Anshan University, can apply for admission to an undergraduate program in Economics at the University of Windsor. Transferring students whose native language is not English must complete an English Proficiency Test administered by either the English Language Institute of the University of Michigan or, Test of English as a Foreign Language (T.O.E.F.L.).

Political Science Degree Completion Programs
General Political Science for Hebei Law and Politics College Graduates
Honours Political Science for Hebei Law and Politics College Graduates

EGYPT

Canadian International College
The University of Windsor's Computer Science B.C.S (Honours Applied Computing) degree program and the Computer Science B.C.S (General) degree program is offered through the Canadian International College (CIC), Egypt.

Articulation Agreements between the University of Windsor's Bachelor of Computer Science (General) and Bachelor of Computer Science (Honours Applied Computing) *(for graduates of CIC Cairo BETCH Four-Year Degree)*

HONG KONG

Hong Kong Baptist University (HKBU)
Students who have completed the two-year Associate Degree program of the College of International Education at HKBU with a cumulative average grade of B and who are otherwise admissible to the University of Windsor, including meeting the University of Windsor's English competency requirements, will receive University of Windsor credits, up to a total of twenty (20) semester courses, provided they passed the respective college courses with a grade of C- or better.

Students will not be restricted to enrolling in a specific program but must present the necessary prerequisites for entry into the program of their choice.

UNITED STATES

Broward Community College
Students who have completed a minimum of 60 credit hours in either the Arts or Science streams of the Centre for American Education (CAE) program with a cumulative average grade of B and who are otherwise admissible to the University of Windsor, including meeting the University of Windsor's English competency requirements, will receive University of Windsor credits, up to a total of twenty semester courses, provided they passed the respective college courses with a grade of C- or better. Students will not be restricted to enrolling in a specific program but must present the necessary prerequisites for entry into the program of their choice.

Owens College
A student who completes an Associate degree at Owens Community College with a grade point average of 2.7 or higher will be accepted by the University of Windsor with advanced standing in up to 20 semester courses in a Bachelor's degree program.

MALAYSIA

Kolej Damansara Utama (KDU) College
Students who have completed a minimum of 60 approved credit hours in either the Arts or Science stream of the School of American University Studies program at any campus of KDU (Malaysia) with a cumulative average grade of B and who are otherwise admissible to the University of Windsor, including meeting the University of Windsor's English competency requirements, will receive University of Windsor credits, up to a total of twenty semester courses, provided they passed the respective college courses with a grade of C- or better. Students will not be restricted to enrolling in a specific program but must present the necessary prerequisites for entry into the program of their choice.

Taylor’s College
A student who completes the American Degree Program at Taylor's College with a G.P.A. of 2.7 (B-) or higher will be accepted by the University of Windsor with advanced standing in up to 20 semester courses in an appropriate Bachelor's degree program. Excluded from this agreement is any provision for transfer from the Engineering Stream in the American Degree Program to the Bachelor of Applied Science degree at the University of Windsor.

SINGAPORE

Overseas Family College
Students who have completed the two-year Diploma program at Overseas Family College with a cumulative average grade of B and who are otherwise admissible to the University of Windsor, including meeting English competency requirements, will receive University of Windsor credits, up to a total of twenty, provided they passed the respective college courses with a grade of C- or better. Students will not be restricted to enrolling in a specific program. The course credits received will be applicable to any Bachelor's program providing the degree requirements of that program allow it. Students will have to meet all regular requirements for the major of their choice.

INDIA

Ansal Institute of Technology
Students who complete two years of study at Ansal Institute of Technology following a prescribed list of courses as defined by this agreement (contact Office of the Registrar for details) may be eligible to enter the third year of the Bachelor of Computer Science (Honours) degree. Students will be required to have obtained a grade of at least 2.4 (C-) or greater in every course taken at AIT, a cumulative grade point average of at least 2.8 (B-) or greater over all computer science courses taken at AIT and, satisfied the University of Windsor’s English competency requirements to be eligible for consideration under this agreement.

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Application/Admission Information

Registration/Fee Regulations

Academic Regulations

Examinations, Grading, and Graduation

CALENDARS (Undergraduate & Graduate)

Responsibility/Disclosure Notifications

Main University Secretariat

APPLICATION/ADMISSION INFORMATION

Application Procedures
Applicants for full-time, undergraduate studies must apply through the Ontario Universities' Application Centre (O.U.A.C.). Current Ontario secondary school students should contact their guidance office for application instructions. All others use the O.U.A.C. 105 application form, which is available at all Ontario universities or via the web at <www.ouac.on.ca>

Applicants for part-time studies must use the University of Windsor application form, which is available via the web at <www.uwindsor.ca/ptapp>

Application Deadlines
Candidates from outside continental North America must apply and submit all supporting documents to the Registrar's Office before March 1 for registration in the Fall term.

All other candidates must apply and submit all supporting documents as follows: August 1 for the Fall term; December 1 for the Winter term; and April 1 for the Summer term (Intersession and Summer Session).

Year III, Honours Bachelor of Social Work programs - February 1
Year III Social Work and Diaspora Studies - February 1
Year III Social Work and Women's Studies - February 1
Year III Forensic Science - May 1
Bachelor of Science in Nursing - March 1

Admission Requirements
(For Students Coming from Ontario Secondary Schools; Students Coming from Other Canadian Provinces; Students Coming from Another Canadian University; Students Coming from a College of Applied Arts and Technology; Students Coming from Lambton College's International Foundation Year; Students Coming from the United States; Students Coming from Outside Canada and the United States; Students who have completed the International Baccalaureate (IB) Diploma Program); For Criminology and Combined Honours Criminology and Social Work Year III Second-Entry Programs; Returning Students)

Admissions for Mature Students

Undergraduate English Language Proficiency Requirement

Students Transferring from Other Institutions (See Advanced Standing and Credit Transfer Policy)

Click here for more information on University/College Agreements.

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REGISTRATION/FEE REGULATIONS

TIME AND PLACE OF REGISTRATION
PROVISIONAL REGISTRATION
WITHDRAWAL FROM PROGRAMS OR COURSES
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FEE REGULATIONS AND SCHEDULE
PAYMENT OF FEES
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TUITION AND EDUCATION CREDIT CERTIFICATE (T2202A)
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WITHDRAWAL AND REFUND POLICY
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SCHEDULE OF FEES

TIME AND PLACE OF REGISTRATION

Each student must register at the beginning of each term/session in the manner designated by the Registrar. Although the courses selected may be offered in different Faculties of the University, all students register through the Registrar's Office only.

Deadline dates for fee payment vary from term to term (see Payment of Fees and Academic Dates). A student who maintains an active course registration on the first day of term is obligated to make fee payments in accordance with the procedures, see Payment of Fees. The non-payment policies will be applied to a student who has not made satisfactory fee arrangements with the cashier. (See Non-Payment of Fees and Charges).

PROVISIONAL REGISTRATION

A student whose application is not complete by the regular registration period may be allowed to register provisionally. All required forms and documents must be submitted before the last day of late registration.

WITHDRAWAL FROM PROGRAMS OR COURSES

1) The status of a student who withdraws from full-time studies is left to the decision of the Faculty in which the student is registered and will be reported to the student through the Office of the Registrar.

Students who find it necessary to withdraw from a course or from the University may drop their courses over the web or notify the Registrar in person or by registered mail.

2) Students wishing to withdraw from a course or courses may do so over the web or may use the "Course Change Form" which is available from the Office of the Registrar.

Students must withdraw from a course or courses within the withdrawal periods as indicated below. Specific dates vary from term to term and are indicated in the Academic Dates. Withdrawal periods for courses in other sessions are normally set at approximately two-thirds of the course length. The withdrawal will be entered on the student's transcript as VW, (Voluntary Withdrawal), which is defined as "Withdrawal in good standing. No academic credit."

Students may not withdraw from a course or courses after the appropriate designated withdrawal period. After the voluntary withdrawal period for a course, students remain registered and will be assigned grades as appropriate.

A student who wishes to drop a course or courses after the appropriate withdrawal period based on medical or compassionate grounds should refer to "Appeals" or to Senate Bylaw 51 which is available in the University Secretariat or via the web at www.uwindsor.ca/senate.

3) The dates for withdrawal from courses which may result in partial tuition refunds vary from term to term. See the Academic Dates (through the Office of the Registrar) for appropriate dates and Withdrawal and Refund Policy. The Cashier's Office will make the appropriate adjustment of fees where applicable.

Withdrawal Period

One-term course offered during Fall or Winter Term - within nine weeks of beginning of term. (Not including Study Week)

Two-term course - within four weeks of beginning of the second term.

Summer Term (Intersession/Summer Session)
Three week course - within two weeks of beginning of session.
Six week course - within four weeks of beginning of session.
Eight week course - within five weeks of beginning of session.
Twelve week course - within nine weeks of beginning of session.

FLEXIBLE LEARNING

The University of Windsor offers a flexible approach to learning. Credit courses are offered daytime, evening classes, through distance education and partial distance education. Courses may be taken any of these ways or any combination of these ways.

Campus day or evening classes
1. Classes on campus, three hours per week, spread over two or three days, or all on one evening, per week. Some courses have additional lab hours.

Distance - Independent Study
2. No classes to attend; learn using print materials, CDs, web sites and online discussion with instructor and classmates

Partial Distance - On-campus Classes + Independent Study
3. Some classes or labs on campus, combined with independent study.

For program information, course offerings, fees, course textbooks and material information visit www.uwindsor.ca/flexible.

FEE REGULATIONS AND SCHEDULE

The University reserves the right to make changes without prior notice in the various fee schedules, as well as changes in rules and regulations and the revision or cancellation of particular courses and programs. The acceptance of fees does not necessarily imply approval of registration.

The following regulations apply to all students.

PAYMENT OF FEES

Fees are due and payable before the commencement of regular term classes. As a convenience, students may pay their tuition fees at any time prior to the appropriate due date. It is the responsibility of the student to ensure that deadlines are met. It is the student's responsibility to be familiar with and understand all the University regulations contained in the Calendar; to understand how adding and dropping a course or courses, withdrawal, etc., affects a tuition fee account; and to ensure that tuition fees are paid in full without any notice from the University. Further, failure to receive a statement of account through the mail does not constitute a valid reason for nonpayment of fees. It is the responsibility of the student to check their fee account balance details and all available methods of payments on-line at www.uwindsor.ca/sis. You will need your student number and PIN to access this information.

Cheques or other remittances must be made payable to The University of Windsor and must be received by the Cashier's Office prior to the due date. The student's name, identification number, address and telephone number should be recorded in the upper portion of the form of the remittance to ensure that the records are properly credited.

Students may pay their fees at any chartered bank in Canada by using a bank payment form available at the Cashier's Office. If a student has a grant and/or loan (*e.g.*, OSAP), the loan must be assigned to the University to pay the fees. Any known difference between the amount of the award and the fees must be paid on or before the due date.

Students who are unable to complete payment of fees by the prescribed due date must arrange a fee deferment. Daily interest charges and academic sanctions (see "Interest Charges on Outstanding Accounts") may apply. Deferments are permitted under the following circumstances:
(a) a student has evidence of having been awarded a Canada Student Loan or an Ontario Student Loan.
(b) a student has evidence of having been awarded a scholarship, bursary or similar award, which may be used to pay the fees.

Students who are sponsored and require invoices to be sent for collection of fees must bring the appropriate documentation to the Cashiers' Office, 1st Floor, Chrysler Hall North.

Notes:

1) It is the responsibility of the student to accurately report his or her academic status and correctly calculate the amount owing to the University for fees and other charges. Where calculations are incorrect or full payment is not made, daily interest will be charged on balances outstanding after the payment due date. Students should check all calculations thoroughly.

Any errors in a student's academic program, level, and status in Canada must be reported to the Office of the Registrar. Any errors which result in the incorrect calculation of fees owing do not relieve the student of the responsibility for payment of these fees. Students will be responsible for any additional charges incurred as a result of changes in their academic profile for all terms that are applicable.

2) It is the responsibility of the student paying his or her fees by cheque to ensure that sufficient funds are available to cover any cheques made payable to the University of Windsor. Cheques returned by the student's bank for any reason will incur return cheque penalties plus other penalties.

3) Every effort is made to process payments in a timely manner; however, cheques are valid for a period of six months and may be cashed at any time during that period.

INTEREST CHARGES ON OUTSTANDING ACCOUNTS

A daily interest charge will be calculated on all outstanding accounts. The interest will be compounded monthly.

A student who has failed to comply with the above regulations may have his or her registration cancelled as of the date on which the unpaid fees were due.

NON-PAYMENT OF FEES AND CHARGES

Information concerning academic results of any student who has an overdue debt owing to the University shall be withheld until the debt is settled. This includes transcripts, tuition tax receipts and diplomas. Overdue accounts which are not settled in a timely manner may be referred to an external collection agency as deemed necessary by the Cashiers Office.

Students who are graduating and who have an outstanding debt will be permitted to attend Convocation, but they will not receive their diplomas until all their debts are settled.

Any student who has an overdue debt owing to the University may not be permitted to re-register until the debt is settled in full by cash, certified cheque, debit card, a money order, bank draft, electronic back transfer. Students who are settling an overdue account who pay with a personal cheque will have the hold remain on their account for 30 days (45 days for foreign cheques and drafts) to ensure the cheque clears the bank. The hold may be lifted upon presentation of a copy of the front and back of the cancelled cheque.

A student who has not made a satisfactory fee arrangement by the appropriate fee payment due date (see "Payment of Fees") may be subject to cancellation of his/her registration. Students will be notified by mail of any cancellations due to non-payment using the most recent address available. Appropriate charges will be assessed effective the date of cancellation.

Note: Non-payment of fees does not automatically result in the cancellation of

registration in a course or courses.

Any student whose registration has been cancelled for default of payment is required to apply for reinstatement of registration at the Office of the Registrar. If the application is approved, a $50.00 reinstatement fee is added to any other assessable charges.

Overdue accounts must be paid by cash, certified cheque, or money order.

Any student who has an unresolved grievance concerning fees or other charges may present an explanatory letter with appropriate official documentation (e.g. doctor's notes, etc.) to the Credit Manager, Cashier's Office.

TUITION AND EDUCATION CREDIT CERTIFICATE (T2202A)

A tuition and education tax certificate (T2202A) in a form acceptable to the Canadian Customs and Revenue Agency (CCRA) is available via the Student Information System at www.uwindsor.ca/sis. This certificate is made available to all students whose accounts were paid in full by December 31 of the previous year. Student accounts that are not paid in full will show zero dollars for any semester which remains unpaid. If a student subsequently pays the semester, revised figures will be made available to them.

SCHOLARSHIPS

Undergraduate scholarships and other awards paid to students through the Finance Office are usually credited to the student's account on the basis of one half payable in each term. A refund cheque for any credit balance up to the value of all scholarships applied to the account for that term will be available to the student at the Cashiers' Office and Awards Office. This date will be posted on the Cashiers' website (www.uwindsor.ca/awards). In order to pick up these cheques in the Cashiers' Office, photo ID will be required, with no exceptions.

WITHDRAWAL AND REFUND POLICY

Graduate students who, for any reason, wish to withdraw from the University must notify, in writing, the Office of Graduate Studies, as otherwise resumption of graduate study at this University may be difficult or impossible.

Full-time undergraduate students who intend to withdraw completely from the University are required to undergo an interview and complete the appropriate forms at the Office of Student Development and Support.

Notice by telephone is not acceptable. Failure to attend classes does not constitute a withdrawal. Full refund will be given to part-time students enrolled in a course that has been cancelled by the University. Full and part-time students withdrawing from regular courses during the periods indicated below will be assessed fees as indicated.

WITHDRAWAL DURING FALL OR WINTER TERM	FEE PAYABLE
Week(s) One and Two	None
Week(s) Three through Nine	Partial Fees Payable
After Week Nine	Full fees for the appropriate program payable

Refunds resulting from withdrawals will be available on request.

FREE TUITION FOR STUDENTS 65 YEARS OF AGE AND OVER

The University of Windsor offers an incentive of free tuition and incidental fees for students sixty-five years of age and over, except in the case of professional programs. It is felt that people in this group might wish to avail themselves of the University facilities, not only for degree purposes, but perhaps for personal enrichment and the fuller utilization of their leisure time. If you feel that your needs can be served according to this program, we encourage and invite you to contact the Advising Centre. This applies to Canadian citizens or Permanent Residents of Canada only.

SCHEDULE OF FEES

The Board of Governors reserves the right to make changes without notice in the published schedule of fees and charges if, in its opinion, circumstances so require. Any such changes will be reflected in the Self-Assessment form issued through the Cashier's Office before registration. It is the responsibility of the student to obtain this information.

The schedule of fees changes annually. Contact the Cashier's Office for information on the current schedule of fees, which outlines tuition, incidental, and other fees.

The following miscellaneous fees and charges are payable as incurred:

Undergraduate part-time studies application fee		$50.00
Letter of Permission		$40.00
Letter of Permission Revision Form		$20.00/revision
Undergraduate change of course		$5.00
Overload course		Part-time per course tuition fee
Special examinations (per course):		
	UWin Distance Ed./Supplemental/Make-up (campus)	$40.00
	Distance Ed./Supplemental/Make-up (Off-campus)	Variable
	External agency booking, on campus	$75.00
	External student booking, on campus	$50.00
Evaluation of documents		$50.00
Transcript of academic record (Courier surcharge: Canada (Xpresspost) $10.00; U.S. $20.00; International $50.00; Fax Surcharge: $10.00.		$12.00
Duplicate T2202A: Current year		
	First duplicate is free, each duplicate	

	thereafter	$3.00
Duplicate T2202A: Prior years		$5.00
Late registration (full-time students)		$30.00
Returned cheque charge		$25.00/cheque
Registration reinstatement		$50.00
Second Entry (Program Change) Revised Visa Letters		$10.00/letter
Duplicate Graduation Eligibility Confirmation Letters		$10.00/letter
Temporary Diplomas (issued prior to Convocation)		$10.00/copy
Duplicate Diplomas (Issued after Convocation)		$50.00
Application to graduate fee		
	Before deadline	$35.00
	After deadline	$75.00
Duplicate Enrolment Certification/Attendance Letters		$10.00/letter
"To Whom It May Concern" Miscellaneous Letters (degree verification: for employment, etc.)		$10.00/letter
Historical Document Search/Student Status Verification for Legal Offices		$50.00/request
Grade Appeal Fee (per course)		$20.00

Rental of Graduation hood (two Days Max.) *$50.00 deposit - $30.00 refund upon return (charge $20.00)		*$20.00

For information regarding residences, meal plan, residence deposits, deposit refund policies, and University houses, please contact the Office of Residence Services, Room 49, Vanier Hall, University of Windsor, Windsor Ontario.

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ACADEMIC REGULATIONS

Students are responsible for becoming familiar and complying with the general regulations of the University as contained in this section. Additionally, students must be familiar and comply with the regulations of the Faculty in which they are enrolled. These particular requirements may be found in the program sections of this calendar.

Students also are directed to read the *Statement of Responsibility*, and the calendar of important dates and deadlines under *Academic Dates*.

ACADEMIC ADVISING
CLASSIFICATION OF STUDENTS (definitions for full-time/part-time student, audit student, academic probation, *etc.*)
COMBINED MAJOR (majoring in two subject areas)
COURSE CONTENT
COURSE NUMBERING SYSTEM AND FACULTY AND PROGRAM CODES
DEFINITION OF COURSES AND SESSIONS
OPTIONS (courses in subjects other than the major subject)
TRANSFERRING TO ANOTHER PROGRAM

ADDITIONAL DEGREES
ADVANCED STANDING AND CREDIT TRANSFER (advanced standing and transfer credits reduce the total number of courses a student must complete for a degree)
CERTIFICATE PROGRAMS
COURSE EQUIVALENCY POLICY (permission to substitute one course for another)
COURSE OVERLOAD POLICY (course taken in addition to the prescribed semester or term load)
INTRODUCTORY STATISTICS COURSES
LETTERS OF PERMISSION (permission to take courses at another university for credit towards their UWindsor degree)
MINOR (provides a general knowledge of an area of study)
RESIDENCY REQUIREMENTS (the number of courses that must be completed at the University of Windsor)
REPETITION OF COURSES
SENIOR-LEVEL COURSE REQUIREMENTS (minimum number of courses to be completed at the 200-level or above)
STANDING REQUIRED FOR CONTINUATION IN PROGRAMS AND FOR GRADUATION (minimum major and cumulative averages required to continue in a program of study and to graduate)

ACADEMIC ADVISING

The responsibility for becoming familiar and complying with the requirements for degrees and with academic regulations rests primarily with the student. Every student can access a "Degree Audit Report" on the Student Self Service page at https://my.uwindsor.ca which reports a student's progress towards fulfilling degree requirements.

In addition, academic advising is strongly recommended for all students. Academic units provide individual assistance to students both in the selection of their programs of studies and in the choice of courses in keeping with program requirements. General questions normally should be addressed to the Associate Dean of the Faculty.

Students are strongly urged to seek course and program advising to ensure that they understand degree requirements. It is recognized that many students may not have decided on their major areas or on their final career goals prior to entering University. Consequently, it is not unusual for students to change their programs of study after taking several courses. Every effort is made to assist such students, within the limits of the requirements of the various programs.

Students who are considering program changes may request assistance from advisors within their proposed area of study. Application forms for a change of program are available on the web on the Student Self Service page at

https://my.uwindsor.ca.

Students are required to have declared a major by the time they have successfully completed ten semester courses.

CLASSIFICATION OF STUDENTS
A full-time student is one who is registered in four or more undergraduate courses in a term.

A part-time student is one who is registered in fewer than four undergraduate courses in a term.

A regular student is one who has met the average requirements for admission or the minimum average requirements for continuation in his or her program of studies.

A conditioned student is one who, at the time of admission, does not have standing in a required subject or subjects.

A visiting student is one who registers and takes courses for credit for the purpose of transferring the credit to the university at which he or she was previously registered. Normally, visiting students are advised to have written permission from the home university in order to register for courses.

A special or non-degree student is one who is taking courses for credit but not proceeding to a degree at this University.

An audit student is one who attends (a) course(s) but does not receive any grade(s) or credit for the course(s) towards a degree. Such a student will not be allowed to write examinations and may not be graded in any way, but will be required to pay the regular fees for the course(s).

A student on academic probation is one who has not met the full admission requirements to a program or a student who, once admitted, has shown unsatisfactory progress at the conclusion of the previous term. (See the regulations pertaining to each Faculty.)

Academic probation is removed if a student demonstrates satisfactory progress by the end of the probationary period. Normally, a student will be required to withdraw from a faculty if performance is not satisfactory at the conclusion of the academic probationary period.

For regulations pertaining to the possible readmission of students who have been required to withdraw, see the regulations pertaining to each Faculty.

COMBINED MAJOR

Students wishing to combine two areas of study from the Arts, Languages, Social Sciences, or Science within a single four-year Honours B.A. or B.Sc. program may do so if the areas of study concerned have provided for this possibility in their respective sections of the Calendar. Such programs require a total of forty courses including the successful completion of the major requirements and specified other requirements as defined by each area of study in the appropriate section of the calendar. The area of study selected as the first major will determine the degree awarded. (*e.g.,* BA in English and Chemistry, or BSc in Chemistry and English).

COURSE CONTENT

Information regarding the content and the hours of instruction per week for all courses is to be found in the individual subject area listings. The time schedule for classes can be obtained online at www.uwindsor.ca/registrar/timetable.

The University does not attempt to impose uniformity in methods of course presentation. Therefore, methods of course presentation vary and may involve lectures, lectures combined with class discussion, small group or tutorial instruction, seminars, or other combinations of the above. In all cases, the method(s) to be used will be explained early in the course.

COURSE NUMBERING SYSTEM AND FACULTY AND PROGRAM CODES

Each course is identified by a three-part number. The first part refers to the

Faculty, the second part to the subject area, the third to the level of the course. Thus, the course 02-46-220 would be a course in the Faculty of Arts, Humanities and Social Sciences (02-), in the subject area of Psychology (46-) and would be at a level that places it among courses in the 200 series. The series 100, 200, 300, and 400 numbers are intended to indicate progressively more demanding content and correspondingly increasing background and competence on the part of the students enrolled in the course.

Numbers in the range 100-199 are ordinarily used for the introductory courses in most disciplines. Within the range, however, a lower number does not necessarily signify more elementary content. It is important that students planning their courses have clearly in mind the significance of these numbers so that they may guard against undertaking course work at levels for which they are insufficiently prepared. A number of courses have stated prerequisites which are prior requirements for entry to a course. Students who do not satisfy the prerequisite for a course, or who in the opinion of the instructor do not possess an equivalent background to that of the stated prerequisite, may not register for the course, and may be removed if they register inappropriately.

Faculty of Arts, Humanities and Social Sciences	01- (Arts)/02- (Social Sciences)
Faculty of Science	03-
Faculty of Business Administration	04-
Faculty of Education and Academic Development	05-
Faculty of Engineering	06-
Faculty of Human Kinetics	07-
Faculty of Law	08-
Faculty of Nursing	11-
Inter-Faculty Programs	14-

Program/Course Codes
Note: The Program/Course codes are preceded by the relevant Faculty code.

Arts and Science, 14-56-
Additional Qualification Courses, 05-79-
Biology, 03-55-
Business Administration:

- Accounting, 04-70-
- Business Strategy and Entrepreneurship, 04-75-
- Finance, 04-72-
- Management and Labour Studies, 04-71-
- Management Science, 04-73-
- Marketing, 04-74-

Chemistry and Biochemistry, 03-59-
Civil and Environmental Engineering:

- Civil, 06-87-
- Environmental, 06-93-

Languages, Literatures and Cultures:

- Aboriginal Studies, 01-06-
- Inter cultural Studies, 01-07-
- Asian Studies, 01-10-
- Greek and Roman Studies, 01-11-
- Greek & Roman History, 01-12
- Greek Language & Literature, 01-13-
- Latin Language & Literature, 01-14-
- German, 01-15-
- Italian, 01-21-
- Spanish, 01-23-

Communication, Media, and Film: 02-40-
Forensics, 14-57-
French Studies, 01-29-
General Engineering, 06-85-
Geography: 02-42-
History, 02-43-
Industrial and Manufacturing Systems Engineering, 06-91-
Inter-Faculty, 14-51-
Kinesiology, 07-95-
Labour Studies: 02-54-
Law service courses, 08-99-
Law courses, 08-98-
Mathematics and Statistics:

- Mathematics, 03-62-
- Statistics, 03-65-

Mechanical, Automotive, and Materials Engineering:

- Mechanical, 06-92-
- Automotive, 06-94-
- Materials, 06-89-

Music:

- Music Academic Studies, 01-32-
- Music Performance Studies, 01-33-

Nursing, 11-63-
Philosophy: 01-34-
Physics, 03-64-
Political Science: 02-45-
Psychology: 02-46-
Social Justice: 02-38-
Social Work: 02-47-
Sociology, Anthropology, and

Computer Science, 03-60-
Diaspora Studies, 02-45-
Digital Journalism, 02-30-
Disability Studies, 02-37-
Dramatic Art: 01-24-
Earth Sciences:

Environmental Science, 03-66-

Economics, 03-41-
Education, 05-80-
Electrical and Computer Engineering, 06-88-
English, 01-26-
Environmental Studies, 14-58-

Criminology:

Sociology, Criminology, 02-48-
Anthropology, 02-49-
Planning, 02-50

Visual Arts:

Visual Arts, 01-27-
Art History, 01-28-
Film/Production Courses, 01-39-

Women's Studies, 02-53-

DEFINITION OF COURSES AND SESSIONS

The word "course" generally refers to a 3.00 credit hour offering which is given over one term. Each term includes approximately twelve weeks of classes. During each regular academic year (September to April), the Fall term runs from early September to early December and the Winter term runs from early January to mid-April. Each term concludes with final examinations. Additionally, the University schedules courses in a Summer term which includes Intersession (May - June) and Summer Session (July - August), each of which are approximately six weeks in duration. Courses given in these sessions carry the same credit as those in the Fall and Winter terms. Some courses offered in the Summer Term run from May - August (12 weeks).

In some areas, courses also may be offered for 1.50 credit hours, or for 6.00 credit hours. Courses of any credit hour value may be offered over multiple terms or over a part of a term.

In a few cases a course may be "linked" with another course in the sense that credit is granted only when both courses have been completed successfully. Course descriptions indicate "linked" courses. Unless otherwise indicated, such courses must be taken in successive terms.

The time required to complete programs can vary according to the student's choice. If courses are taken exclusively in the Fall and Winter terms, a general degree normally is completed in three years and a four-year Honours, Major or professional degree in four years of full-time study. Students may choose to accelerate their programs by attending Summer term, Intersession and/or Summer Session, or may spread their programs over a longer period by attending as part-time students. Some programs place a time limit on degree completion. Refer to individual Faculty and program regulations for such limits.

OPTIONS

Options are courses in subjects other than the major subject(s). For the purpose of meeting option requirements the University categorizes its courses as follows:

ARTS(In addition, all Language courses can satisfy Arts options)
Art History
Greek and Roman Studies
Dramatic Art
English and Creative Writing
General Courses, Faculty of Arts, Humanities and Social Sciences (01/02)
Intercultural Studies
Music-Academic Studies
Music-Performance Studies
Philosophy
Visual Arts
Women's Studies*
*The following Women's Studies courses may be taken for Arts credit: 53-106, 53-120, 53-130, 53-230, 53-240, 53-250, 53-236, 53-270, 53-300, 53-335, and 53-345.
The following Inter-Faculty course may be taken for Arts credit: 51-160.

LANGUAGES

Arabic
French
German
Ancient Greek
Italian
Japanese
Latin
Spanish
Hebrew

*Note:*Courses in all languages listed above that may be used to satisfy language option requirements include: xx-100, xx-101, xx-102, xx-200, xx-201, xx-202. xx-300, xx-301. All French Studies courses count as language option requirements. 08-110 and 08-111 (formerly 07-110 and 07-111) also count as language option requirements. All other courses in any language listed above count only as Arts options.

SOCIAL SCIENCES
Anthropology
Communication Studies
Economics***
General Courses, Faculty of Arts, Humanities and Social Sciences (02)
Human Geography (42-)
History
Labour Studies
Planning
Political Science
Psychology
Social Work
Sociology
Women's Studies**
** (53-106, 53-120, 53-130, 53-230, 53-240, 53-250, 53-270, 53-300, and 53-345 can satisfy either a Social Science or an Arts option requirement.)
***All Economics courses will be permitted to satisfy either science or social science options.
The following Inter-Faculty and Environmental Studies courses may be taken for Social Science credit: 51-160, 58-110 and 58-210.

SCIENCE
Biology
Biochemistry
Chemistry
Computer Science
Economics***
Environmental Science
General Courses, Faculty of Science (03)
Geology
Mathematics
Physical Geography (67-)
Physics
Statistics
Women's Studies**

** Women's Studies 53-220 will satisfy either a Social Science or a Science option requirement.
***All Economics courses will be permitted to satisfy either science or social science options.

Note: For students in the Faculty of Arts, Humanities and Social Sciences the following Nursing courses will satisfy a Science option requirement: 63-241, 63-245, 63-351, and 63-391.

PROFESSIONAL
Business Administration
Education
Engineering
Kinesiology
Law
Nursing

PROGRAM TRANSFERS (Transfering to Another Program)

A student who wishes to transfer to a new program may apply on the web on the Student Self Service page at https://my.uwindsor.ca. All program transfers and conditions for transfer are subject to the approval of the Dean in accordance with regulations established by the Faculty into which the student wishes to transfer.

1) Normally a student who has a cumulative average of 60% or greater in the previous program, and who meets the admission requirements of the intended program will be permitted to transfer. Transfer credit will be assessed and awarded in accordance with the Senate Policy on Advanced Standing and Credit Transfer.

2) If a student has been required to withdraw from a program, the student normally will be considered for admission to the new intended program on the same basis as students who have been required to withdraw from the program.

3) All courses that are transferable, whether passed or failed, will be considered in calculating both the cumulative and major averages (where appropriate) in the new program.

4) Applications for transfer to Business are subject to the following deadlines:

- June 15th for Fall semesters
- October 15th for Winter semesters
- February 15th for Inter/Summer semesters

Transfer is based on academic achievement and the availability of space, and a minimum 67% cumulative average is required in order to be considered for a transfer to Business.

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EXAMINATIONS, GRADING, AND GRADUATION

EXAMINATION PROCEDURES
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EXAMINATION PROCEDURES

For information on examinations and testing procedures, see Senate Bylaw 51: Academic Evaluation Procedures.
Student should also become familiar with *Senate Policy on Conduct of Exams and Tests.*

Students with three invigiliated final examinations scheduled on the same calendar day may petition to have one of the examinations rescheduled by completing the appropriate request form available at www.uwindsor.ca/sis. The application must be submitted to the Office of the Registrar by the end of the fourth week of classes (or by the end of the second week of classes for six week courses). *See also Senate Policy on Multiple Final Examinations in One Calendar Day.*

OFF-CAMPUS EXAMINATIONS

A student with a cogent reason may be granted permission to write an examination at an off-campus centre. Application forms are available in the Registrar's Office. To allow sufficient time for arrangements and mailing, approved applications must be submitted, along with the appropriate fee, to the Registrar's Office at least one month prior to the date on which the examination is to be written.

GRADE APPEALS

Before exercising their right of appeal against a grade, students should consult *Senate Bylaw 51, Academic Evaluation Procedures* copies of which are available at the Office of the Registrar or at the University website. Students registered in the JD program should also consult the Academic Status regulations of the Faculty of Law.

All appeals must be made in writing to the appropriate Faculty through the Office of the Registrar, no later than three weeks after the final mark has been released by the Registrar. The official release dates are posted on the web. The appeal must be accompanied by a $20 fee which will be refunded to the student if the appeal is successful. Students must submit a letter of rationale for the appeal, including relevant supporting documents.

A student who wishes to receive consideration on medical or compassionate grounds should communicate with the Office of the Registrar as soon as possible. A letter of rationale and supporting documents (*e.g.*, the attending physician's letter) must be submitted to the Registrar forthwith. (If approved, accommodation may consist of aegrotat standing or other accommodation or alternate evaluation, etc.) See *Senate Bylaw 51, Academic Evaluation Procedures* for details.

HONOUR ROLLS

The new regulations related to 100% averaging and the new grading scale, for the President's and the Dean's Honour Rolls, are not retroactive to terms prior to Fall 2013.

President's Honour Roll Criteria
Eligibility: students in first-entry undergraduate programs
- a minimum of ten courses must be completed;
- designation is granted, as applicable, upon completion of the initial 10 courses and at the end of each semester of full-time or part-time studies thereafter;
- cumulative average of 90% or higher;

- notation is recorded on the transcript at the end of each semester.

Dean's Honour Roll

The following list the criteria for Dean's Honour Roll in each Faculty. Students who have met the criteria for Dean's Honour Roll in their Faculty will have a notation included on their transcript to this effect.

Inter-Faculty Programs
1. Must have completed 10 courses in the previous year,
2. Must be enrolled in an Inter-Faculty program on a full-time basis
3. Must have obtained a cumulative average of 80% or higher

Faculty of Arts, Humanities and Social Science
1. Must have completed at least 10 or more courses with a major from the Faculty of Arts, Humanities and Social Sciences at the University of Windsor.
2. Must have obtained an annual cumulative average of at least 86% by the end of the academic year (*i.e.,* the end of the Winter semester).
3. Must have enrolled in courses with a major from the Faculty of Arts, Humanities and Social Sciences at the University of Windsor in at least one semester during the academic year (*i.e*., Summer, Fall, Winter).

Faculty of Business Administration

For undergraduate students:
1. Students must have been enrolled in a Business program on a full-time basis (*i.e*., four courses or greater) during at least two of the three semesters during the academic year. (*i.e*. Summer/Fall, Summer/Winter, or Fall/Winter). One exception applies: Co-op students may have two "working" semesters during an academic year. In this case, full-time enrolled status is required during the "study" semester.
2. Students must obtain an annual cumulative average and program major annual average of 80% or greater at the end of the academic year (*i.e.,* the end of the Winter semester).

For graduate students:
1. Students must have been enrolled in a graduate program within the Odette School of Business on a full-time basis during at least two of the three semesters during the academic year. (*i.e.,* Summer/Fall, Summer/Winter, or Fall/Winter).
2. Students will be ranked within each graduate program based on their annual average. The top 10% of students within each graduate program will be recognized as Dean's Honour Roll students, with the caveat that they must also have a minimum annual GPA of 80%.

Faculty of Education and Academic Development
No Dean's Honour Roll.

Faculty of Engineering
For a student to be considered for the Engineering Dean's Honour Roll, she/he must be enrolled in an Engineering program, and must normally have:
1. successfully completed at least 10 courses which are required (or allowed as electives) in the Engineering program at the University of Windsor;
2. registered with full time status in his/her two most recent Engineering regular academic semesters;
3. successfully completed at least 10 Engineering program courses within her/his two most recent regular Engineering academic semesters; and
4. achieved a semester average of at least 80% on the transcript of her/his most recent full time enrolment semester.

Faculty of Graduate Studies
See appropriate Faculty related to your discipline for criteria, if any.

Faculty of Human Kinetics
To be eligible:
1. A student must be enrolled in 5 courses in a semester.
2. A student must have an semester average of 80% or above on 5 or more courses.

The Human Kinetics Dean's Honour Roll designation is awarded on a semester basis.

Faculty of Law
No Dean's Honour Roll.

Faculty of Nursing

1. Students will be eligible for the Dean's Honour Roll once they have completed 10 courses while enrolled in the Nursing program and are in good standing at the University of Windsor.
2. Having met the 10-course criteria, membership on the Dean's Honour Roll will be based on level of demonstrated achievement, *i.e.,* average, in subsequent semesters.
3. The student must be enrolled full-time in the semester for which the average is calculated.
4. The student must have achieved a semester average of 80% as recorded on the transcript.

Faculty of Science
1. At least 10 courses completed at the University of Windsor.
2. Full time status in the Fall and Winter semesters.
3. Cumulative average of 80% in the most recent Winter term.
4. Major average of 80% on the transcript of the most recent Winter term. For General Science students replace the major average with the average of all science courses, excluding science courses that cannot be used to satisfy a BSc degree.
5. Registered in a Co-op term in Winter with grades in Fall at required levels.

BOARD OF GOVERNORS MEDALS

Board of Governors Graduation Medals
One medal is allocated to each AAU to be awarded to the students with the highest academic standing as defined in the criteria set out below. One medal is allocated to the General Arts programs, one to the General Social Sciences programs, and one to the General Science program to be awarded to the students with highest academic standing in each of these three general program areas as defined in the criteria set out below. Additional medals could be awarded at the discretion of the Dean, in consultation with the Provost.

Medalists are judged on their total academic performance at the University of Windsor. Students must have completed at least twenty semester courses or equivalent required in their program at the University of Windsor (with the exception of the Faculty of Education and Academic Development). Students will be ranked by major average, and must achieve at least an 83% cumulative average and major average. Both full-time and part-time students are eligible for consideration. Graduates from the previous Fall Convocation will be considered for medals issued at the following Spring Convocation. For programs where no major average is calculated (such as General programs), students will be ranked by cumulative average, and must achieve a cumulative average of at least 83%.

Board of Governors In-Course Medals
These medals are awarded annually, in the Fall semester, to the undergraduate student in each Faculty who had the highest cumulative average of all non-graduating students at the end of the preceding regular (September - May) session. A minimum cumulative average of 78.5% is required. The student must have completed the equivalent of at least ten courses at the University and must be registered full-time in an honours degree program. Students are considered for this medal based on the Faculty in which they are enrolled at the time the medals are awarded.

GRADUATING "WITH DISTINCTION"/"WITH GREAT DISTINCTION"

Students in first-entry degree programs or certificate programs who graduate with a cumulative average from 80% to 89.9% will receive their degree or certificate "With Distinction". Students in first-entry degree programs or certificate programs who graduate with a cumulative average from 90% and above will receive their degree or certificate "With Great Distinction".

APPLICATION FOR GRADUATION

Registration in any program does not constitute an application for a degree, certificate, or diploma.

An official application for graduation must be filled out regardless if you are planning on attending/not attending the graduation ceremony. (Logon to the Student Portal at http://my.uwindsor.ca)
The deadline date to submit an application to graduate is March 1 for Spring Convocation and August 1 for Fall Convocation.

In cases where credit is sought for work done elsewhere, all official transcripts or

other documents as required by the Registrar's Office, but not already submitted, must be conveyed to the Registrar's Office no later than six weeks before Convocation. Failure to comply with these regulations will disqualify the student from graduation at the Convocation concerned (see *Standing Required for Graduation*).

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NOTIFICATION OF DISCLOSURE, CONFIDENTIALITY AND USE OF PERSONAL INFORMATION
VERIFICATION OF OFFICIAL DEGREE PARCHMENTS AND TRANSCRIPTS AND PREVENTION OF FRAUDULENT DOCUMENTATION

STATEMENT OF RESPONSIBILITY OF THE UNIVERSITY

1. The content of this Calendar is provided for the general guidance of the student and is not intended to make any contractual commitments therefor. The Calendar is accurate at the time of its publication, but programs, courses, staffing, etc. are subject to change from time to time as deemed appropriate by the University of Windsor in order to fulfill its role and mission, or to accommodate circumstances beyond its control. Any such changes may be implemented without prior notice and, unless specified otherwise, are effective when made. The official University of Windsor academic calendars are: the Undergraduate Web Calendar, the Graduate Web Calendar, and the Faculty of Law Calendar.

2. This Calendar represents the University of Windsor's best judgment and projection of the course of conduct of the University of Windsor during the periods addressed herein. It is subject to change due to forces beyond the University of Windsor's control or as deemed necessary by the University of Windsor in order to fulfill its educational objectives.

3. Advisors are provided to assist students in planning their academic programs. Advisors are not authorized to change established policy of the University of Windsor. Students are solely responsible for assuring that their academic programs comply with the policies of the University of Windsor. Any advice which is at variance with established policy must be confirmed by the appropriate Dean's Office.

4. Any tuition fees and/or other charges described herein are good faith projections for the academic year. They are, however, subject to change from one academic term to the next as deemed necessary by the University of Windsor in order to meet its financial commitments and to fulfill its role and mission.

5. There are other fees and charges which are attendant upon a student's matriculation at the University of Windsor. These fees or charges may be determined by contacting the University offices which administer the programs or activities in which the student intends to enroll or engage.

6. The University of Windsor reserves the right to terminate or modify program requirements, content, and the sequence of program offerings from term to term for educational reasons which it deems sufficient to warrant such actions.

Further, the University of Windsor reserves the right to terminate programs from term to term for financial or other reasons which it determines warrant such action. The content, schedule, requirements and means of presentation of courses may be changed at any time by the University of Windsor for educational reasons which it determines are sufficient to warrant such action. Programs, services, or other activities of the University of Windsor may be terminated at any time due to reasons beyond the control of the University of Windsor.

7. The course descriptions herein are based upon reasonable projections of faculty and faculty availability and appropriate curriculum considerations. The matters described are subject to change based upon changes in circumstances upon which these projections were based and as deemed necessary by the University of Windsor to fulfill its role and mission.

NOTIFICATION OF DISCLOSURE OF PERSONAL INFORMATION TO STATISTICS CANADA

Statistics Canada is the national statistical agency. As such, Statistics Canada carries out hundreds of surveys each year on a wide range of matters, including education.

It is essential to be able to follow students across time and institutions to understand, for example, the factors affecting enrollment demand at post-secondary institutions. The increased emphasis on accountability for public investment means that it is also important to understand ‘outcomes'. In order to carry out such studies, Statistics Canada asks all colleges and universities to provide data on students and graduates. Institutions collect and provide to Statistics Canada student identification information (student's name, student ID number, Social Insurance Number), student contact information (address and telephone number), student demographic characteristics, enrollment information, previous education, and labour force activity.

The Federal Statistics Act provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information from being released in any way that would identify a student.

Students who do not wish to have their information used are able to ask Statistics Canada to remove their identification and contact information from the national database.

Further information on the use of this information can be obtained from Statistics' Canada's web site: http://www.statcan.ca or by writing to the Postsecondary Section, Centre for Education Statistics, 17th Floor, R.H. Coats Building, Tunney's Pasture, Ottawa, K1A 0T6.

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Programs (Listed Alphabetically)

The University offers the following General and Honours programs. Minors are also offered in most areas of study.

Click here for list of CERTIFICATES
Click here for list of MINORS

[Programs with a Co-op option are identified in the list.]

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z

A
Anthropology (BA)
Anthropology (BA Honours)
Anthropology (BA Honours Combined Program)

B
Behaviour, Cognition and Neuroscience (BSc Honours)
Biochemistry (BSc Honours)
Biochemistry (BSc Honours with Thesis)
Biochemistry (BSc Honours Combined Program)
Biological Sciences (BSc Honours)
Biological Sciences (BSc Honours with Thesis)
Biological Sciences (BSc Honours Combined Program)
Biology and Biochemistry (Health and Biomedical Stream) (BSc Honours)
Biology and Biotechnology (BSc Honours)
Built Environment (see VABE)
Business Administration (BComm Honours)
Business Administration (BComm Honours) (with Co-op option)
Business Administration and Computer Science (BComm Honours)
Business Administration and Computer Science (BComm Honours) (with Co-op option)
Business Administration and Economics (BComm Honours)
Business Administration for University Graduates (BComm)
See also Law/Master of Business Administration (Integrated JD/MBA program)

C
Certificate Programs (Accounting (post-graduate certificate), Arts Management, Business Administration, Electrical Engineering (honours certificate), Labour Studies, Law and Politics, North American Studies, Public Administration, Second Language Education, Women's Studies)
Chemistry (BSc Honours)
Chemistry (BSc Honours with Thesis)
Chemistry (BSc Honours Combined Program)
Chemistry and Physics (BSc Honours)
Chemistry and Physics (BSc Honour with Thesis)
Child Psychology (BA)
Child Psychology (BA) (for Ontario College Child and Youth Care Graduates)
Civil Engineering (BASc) (Co-op)
Civil Engineering (BASc) (Degree completion program for Graduates of St. Mary's University Diploma for Engineering)
Civil Engineering (Honours Certificate)
Communication, Media, and Film (BA)
Communication, Media, and Film (BA Honours)
Communication, Media, and Film (BA Honours Combined Program)
Computer Science (BCS)
Computer Science (BCS Honours Applied Computing) (With or without Co-op)
Computer Science (General) (Programs for Qualifying Ontario and Other College Diploma Holders)
Computer Science (BCS Honours Applied Computing) (with or without Co-op) (Program for Qualifying Ontario and Other College Diploma Holders)
Computer Science (Honours Applied Computing) for University Graduates
Computer Science (General) and (Honours Applied Computing) Articulation

Agreements (for CIC Cairo four-year BTEC degree holders)
Computer Science (General) and (Honours Applied Computing) Articulation Agreements (for Qualifying Ontario CAAT (or equivalent) Students with 2 Years of Study at CAAT (or equivalent) diploma program)
Computer Science (BCS Honours) (with Co-op option)
Computer Science (BSc Honours Combined Program)
Computer Information Systems (BSc Honours) (with Co-op option)
Computer Science for University Graduates (BCS)
Computer Science with Software Engineering Specialization (BSc Honours) (With or without Co-op)
Criminology (BA Honours)
Criminology (BA Honours Combined Program)

D

Developmental Psychology (BA Honours)
Developmental Psychology (BA Honours) (for Ontario College Child and Youth Care Graduates)
Developmental Psychology (BA Honours with Thesis)
Developmental Psychology (BA Honours with Thesis) (for Ontario College Child and Youth Care Graduates)
Developmental Psychology (BA Honours Combined Program)
Developmental Psychology (BA Honours with Thesis Combined Program)
Diaspora Studies (BA Honours Combined Program)
Digital Journalism:
-BA Combined Honours Digital Journalism and Communication, Media and Film
-BA Combined Honours Digital Journalism and English Language and Literature
-BA Combined Honours Digital Journalism and English Literature and Creative Writing
-BA Combined Honours Digital Journalism and Political Science
Disability Studies (BA Honours)
Disability Studies (BA Honours) (for College of Applied Arts and Technology Graduates)
Disability Studies (BA Honours) (for Ontario College Child and Youth Care Graduates)
Disability Studies and Psychology (BA Honours)
See also Social Work for Social Work and Disabilities Studies
Discovery Program (Undeclared Major)
Drama (BA)
Drama (BA Honours)
Drama (BA Honours Combined Program)
Drama and Communication, Media, and Film (BA Honours)
Drama in Education and Community (BA Honours)
Dramatic Art: Acting (BFA Honours)

E

Economics (BA)
Economics (BA Honours)
Economics (BSc Honours)
Economics (BA Honours Combined Program)
Economics (BSc Honours Combined Program)
Education (BEd)
Education - Concurrent Programs :
Education - Concurrent BA/Bachelor of Education/Diploma in Early Childhood Education (BA/BEd/ECE)
Education (BEd)/Diploma in Technological Education
Education (BEd)/Diploma in Early Childhood Education (BEd/ECE)
-Concurrent Bachelor of Arts in French Studies (Honours)/Bachelor of Education
-Concurrent Bachelor of Mathematics (Honours) /Bachelor of Education
-Concurrent Bachelor of Science (Honours) Chemistry (with thesis)/Bachelor of Education
-Concurrent Bachelor of Science (Honours) Chemistry/Bachelor of Education
-Concurrent Bachelor of Science (Honours) Biological Sciences(with thesis)/Bachelor of Education
-Concurrent Bachelor of Science (Honours) Biological Sciences/Bachelor of Education
-Concurrent Bachelor of Computer Science (Honours)/Bachelor of Education
Electrical Engineering (BASc) (with Co-op option)
English Language and Literature (BA)
English Language and Literature (BA Honours)
English Language and Literature (BA Honours Combined Program)
English Literature and Creative Writing (BA Honours)

English Literature and Creative Writing (BA Honours Combined Program)
Engineering Technology (BEngTech) (General, Civil stream, Mechanical Stream)
Environmental Engineering (BASc) (with Co-op option)
Environmental Science (BSc Honours)
Environmental Science (BSc Honours with Thesis)
Environmental Studies (BES Honours)

F
Family and Social Relations (BA)
Family and Social Relations (BA Honours)
Family and Social Relations (BA Honours Combined Program)
Forensic Science (BFS Honours)
Forensics (BA Combined Honours)
French Studies (BA)
French Studies (BA Honours)
French Studies (BA Honours Combined Program)
(See also Education for the Concurrent Bachelor of Arts in French Studies (Honours)/Bachelor of Education)

G
General Science (BSc)
General Science (BSc) - Degree Completion Program
Greek and Roman Studies (BA Honours Combined Program)
Greek and Roman Studies (Greek or Latin Option) (BA Honours)

H
History (BA)
History (BA Honours)
History (BA Honours Combined Program)

I
Industrial Engineering (General Option) (BASc) (with Co-op option)
Industrial Engineering with Minor in Business Administration (BASc) (with Co-op option)
Inter-Faculty Programs *(includes Interdisciplinary Arts and Science (BAS) including double major concentration and double minor concentration, Environmental Studies (BES), Forensic Science (BFS) and Combined Bachelor of Arts in Forensics)*
Intellectual Property Law
Interdisciplinary Arts and Science (BAS Honours)
International Relations and Development Studies (BA Honours)

K
Kinesiology - Sport Management (BHK Honours) with Co-op option)
Kinesiology - Movement Science (BHK Honours) (with Co-op option)
Kinesiology - Sport Studies (BHK Honours) (with Co-op option)
Kinesiology - Sport Management (Degree Completion Program with Lambton College)
Kinesiology - Sport Management (Degree Completion Program with Durham College)

L
Labour Studies (BA)
Labour Studies (BA Honours Combined Program)
Labour Studies (BA Honours)
Labour Studies (BA General) or (BA Honours) (Degree Completion programs for graduates with a Three-year Business Administration Diploma from a College of Arts and Applied Technology)
Labour Studies with Human Resource Certificate from a College of Arts and Applied Technology
Law (JD)
Law/Juris Doctor (Canadian and American Dual JD Program)
Law/Master of Business Administration (Integrated JD/MBA program)
Law/Master of Social Work (MSW/JD)
Liberal Arts and Professional Studies (BA)
Liberal Arts and Professional Studies (Honours)

Liberal Arts and Professional Studies: Aeronautics Leadership (Flight Option) (Honours)
Liberal Arts and Professional Studies for Career Professionals Degree Completion Program (for Graduates of Qualifying CAAT (or equivalent) Advanced Diploma Programs)

M

Mathematics (BMath)
Mathematics (BMath Honours)
Mathematics (BMath Honours Combined Program)
Mathematics and Computer Science (BMath Honours)
Mathematics and Statistics (BMath Honours)
Mechanical Engineering (General Option) (BASc) (with Co-op option)
Mechanical Engineering with Automotive Engineering Option (BASc) (with Co-op option)
Mechanical Engineering with Aerospace Option (BASc) (with Co-op option)
Mechanical Engineering with Materials Option (BASc) (with Co-op option)
Mechanical Engineering with Environmental Option (BASc) (with Co-op option)
Mechanical Engineering (BASc) (General, Automotive, Environmental or Materials) Articulation Agrements for St. Mary's University Diploma for Engineering
Media Art Histories and Visual Culture (BA Honours)
Modern Languages (BA Honours Combined Program)
Modern Languages (with year abroad) (BA Honours)
Modern Languages with Two Languages Option (BA Honours Program)
Modern Languages and Second-Language Education (BA Honours)
Music (BA Honours)
Music (BA Honours Combined Program)
Music (BMus Honours)
Music Therapy (BMusTh Honours)

N

Nursing - Collaborative BScN Program
Nursing (BScN) (for Lambton College Practical Nursing Graduates)

O

P

Philosophy (BA)
Philosophy (BA Honours)
Philosophy (BA Honours Combined Program)
Physics (BSc Honours Combined Program)
Physics (BSc Honours) (with thesis option and with co-op option)
Physics (Physics and High Technology) (BSc Honours) (with thesis option and with co-op option)
Physics (Medical Physics) (BSc Honours) (with thesis option and with co-op option)
Political Science (BA)
Political Science (BA) (for Hebei Law and Politics College Graduates)
Political Science (BA Honours)
Political Science (BA Honours) (for Hebei Law and Politics College Graduates)
Political Science (BA Honours Combined Program)
Political Science with Bilingual Specialization (BA Honours)
Political Science with Law and Politics Specialization (BA Honours)
Psychology (BA)
Psychology (BA) (for Ontario College Child and Youth Care Program Graduates)
Psychology (BA Honours)
Psychology (BA Honours) (for Ontario College Child and Youth Care Program Graduates)
Psychology (BA Honours with Thesis)
Psychology (BA Honours with Thesis) (for Ontario College Child and Youth Care Program Graduates)
Psychology (BA Honours Combined Program)
Psychology (BA Honours with Thesis Combined Program)
See also Disabilities Studies for BA Honours Disabilities Studies and Psychology
Psychology (BA Honours) (for Ontario College Child and Youth Care Program Graduates)
Post-Graduate Certificate in Accounting

S
Social Work (BSW Honours)
Social Work (BSW Honours for University Graduates)
Social Work (BSW Honours) (for Ontario College Child and Youth Care Program Graduates)
Social Work and Diaspora Studies (BSW Honours)
Social Work and Disability Studies (BSW Honours)
Social Work and Women's Studies (BSW Honours)
Sociology (BA)
Sociology (BA Honours)
Sociology (BA Honours Combined Program)
Social Justice (BA Honours Combined Program)

U
Undeclared Major (Discovery Program)
V
Visual Arts (BA)
Visual Arts (BA Honours Combined Program)
Visual Arts (BFA Honours)
Visual Arts and the Built Environment (BFA Honours VABE)
Visual Arts and Communication, Media, and Film (BA Honours)

W
Women's Studies (BA)
Women's Studies (BA Honours)
Women's Studies (BA Honours Combined Program)

Fall 2015 Undergraduate Calendar

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Programs (Listed by Faculty and Departments/Program Areas)

Departments/Program Areas are listed alphabetically by Faculty.
Click on the Department or Program Area and follow the link for program information.

Inter-Faculty Programs
Arts and Science (includes Anthrozoology, Linguistics)
Digital Journalism
Environmental Studies
Forensics

Faculty of Arts, Humanities and Social Sciences
Communication, Media, and Film
Dramatic Art
English, Language, Literature and Creative Writing
History
Labour Studies
Languages, Literatures and Cultures (includes Greek and Roman Studies, French Studies, Modern Languages)
Liberal Arts and Professional Studies
Philosophy
Political Science (includes International Relations and Development Studies)
Psychology (includes Behaviour, Cognition and Neuroscience, Disability Studies)
School of Creative Arts
Social Justice Studies
Social Work (includes Disability Studies)
Sociology, Anthropology and Criminology (includes Family and Social Relations)
Women's and Gender Studies

Faculty of Business Administration (Odette School of Business)

Faculty of Education and Academic Development

Faculty of Engineering
Civil and Environmental Engineering
Electrical and Computer Engineering
Industrial and Manufacturing Systems Engineering
Mechanical, Automotive and Materials Engineering

Engineering Technology (BTech)

Faculty of Human Kinetics
Kinesiology

Faculty of Law

Faculty of Nursing

Faculty of Science
Biological Sciences (includes Behaviour, Cognition and Neuroscience)
Chemistry and Biochemistry
Computer Science
Earth and Environmental Sciences
Economics
General Science
Mathematics and Statistics
Physics

Schulich School of Medicine and Dentistry – Windsor Program

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UNIVERSITY/COLLEGE AGREEMENTS

FOR STUDENTS FROM ALL COLLEGES OF APPLIED ARTS AND TECHNOLOGY (CAAT)

DURHAM COLLEGE
FANSHAWE COLLEGE OF APPLIED ARTS AND TECHNOLOGY
GEORGE BROWN COLLEGE OF APPLIED ARTS AND TECHNOLOGY
GEORGIAN COLLEGE OF APPLIED ARTS AND TECHNOLOGY
HUMBER COLLEGE INSTITUTE OF TECHNOLOGY AND HIGHER LEARNING
LAMBTON COLLEGE OF APPLIED ARTS AND TECHNOLOGY
MOHAWK COLLEGE OF APPLIED ARTS AND TECHNOLOGY
ST. CLAIR COLLEGE OF APPLIED ARTS AND TECHNOLOGY
SENECA COLLEGE
SHERIDAN COLLEGE INSTITUTE OF TECHNOLOGY AND ADVANCED LEARNING
SIR SANDFORD FLEMING COLLEGE OF APPLIED ARTS AND TECHNOLOGY
UNIVERSITY - TO - COLLEGE AGREEMENTS WITH ST. CLAIR COLLEGE OF APPLIED ARTS AND TECHNOLOGY
FORMAL UNIVERSITY/COLLEGE AGREEMENTS WITH OTHER INSTITUTIONS (in Ontario, Brunei, China, Egypt, Hong Kong, United States, Malaysia, Singapore, India)

ADMISSION REQUIREMENTS FOR TRANSFER STUDENTS (including from a College of Applied Arts and Technology, from Another University, from Lambton College's International Foundation Year, Academic Transfer Credit – Courses)

CANADIAN COLLEGES AND RECOGNIZED UNIVERSITIES
Bachelor of Engineering Technology (BEngTech): Graduates from three-year diploma programs in Engineering Technology from Colleges of Applied Arts and Technology (CAATs) or comparable degrees from other provinces, and individuals with a degree in a technical/science area from a recognized university who are seeking technology designation are eligible to apply to the Bachelor of Engineering Technology program. Applicants with university degrees may be eligible to receive up to four courses of advanced standings upon admission. (For more details click BEngTech)

FOR STUDENTS FROM ALL COLLEGES OF APPLIED ARTS AND TECHNOLOGY

From a College of Applied Arts and Technology: Applicants who have completed a minimum of one year of a CAAT diploma program that is academic in nature with a minimum cumulative average of B (3.0) at the CAAT will be considered for admission to First Year of an appropriate program. Applicants who have graduated from a three-year CAAT program that is academic in nature with a minimum cumulative average of B (3.0) at the CAAT will be considered for admission to Second Year of an appropriate program.

1) Business Programs (Three Year Diploma): Students may enter the Honours Business Administration program after completing a three-year College business diploma program with a minimum cumulative average of B- or better and a minimum grade of B- in each transferable course or minimum cumulative average of B- for each grouping of transferrable courses and in the case of one to one transfers of specified 3rd and 4th years courses, an A- average. Such graduates may be granted up to twenty semester course credits towards the Bachelor of Commerce - Honours Business Administration degree.

2) Business Programs (Two Year Diploma): Graduates of two-year diploma programs in business from any College of Applied Arts and Technology with a cumulative average of B- may transfer to the Odette School of Business Administration at the University of Windsor subject to the following:
(a)Applicants will be granted a maximum of two terms' credit towards the Bachelor of Commerce program.
(b)A remedial course in mathematics may be necessary in order for transfer students to pursue the first-year Mathematics course required in the Bachelor of Commerce program.

3) General Arts and Science Diploma and Liberal Arts and Science Diploma programs (Two Year Diploma): Graduates of General Arts and Science diploma programs, Liberal Arts and Science diploma programs, and equivalent diploma programs may receive transfer credit for up to ten courses. Transfer credit is awarded for approved courses with a minimum grade of B (3.0). Refer to the Faculty of Arts, Humanities and Social Sciences for current approved course lists.

4) Computer Science or Computer Programming or Information Technology (Three Year Diploma): Graduates of a three-year Computer Science or Computer Programming or Information Technology Diploma program from a college of applied Arts and Technology (CAAT), that is broadly equivalent to the three-year Diploma program T861 (Computer Systems Technology – Networking) offered by St. Clair College of Applied Arts and Technology at Windsor, Ontario, with a grade-point average of at least 3.0 out of 4.0 (or a cumulative average of at least a B grade), are eligible, within 10 years of graduation, for admission to Bachelor of Computer Science (General) degree program offered by the School of Computer Science at the University of Windsor under the provisions of this agreement. Graduates of CAAT program, specified above, applying to the University of Windsor for the Bachelor of Computer Science (General) Degree Program more than 10 years after completing the Diploma Program, with a grade point average of at least 3.0 out of 4.0 (or a cumulative average of at least a B), will require the approval of the Director of the School of Computer Science. In addition to the appropriate three-year Diploma and grade point average, applicants to the Bachelor of Computer Science (General) Degree Completion Program are required to have successfully completed Grade 12U Advanced Functions. The successful completion of Grade 12U Calculus and Vectors is strongly recommended. Students admitted to the Bachelor of Computer Science (General) Degree Completion Program will obtain the equivalent of 1.5 years of Advanced Standing (or awarded 15 course transfers). Additional credit for courses taken toward the CAAT Diploma will not be permitted. Students are required to complete fifteen (15) courses at the University of Windsor in fulfillment of the requirements of the Bachelor of Computer Science (General) Degree Completion Program. (Please refer to the **Bachelor of Computer Science (General)or Bachelor of Computer Science (Honours Applied Computing) degree programs** for more details.)

5) Bachelor of Computer Science (General) and (Honours Applied Computing) (Co-op) for Qualifying Ontario CAAT (or equivalent) Students with 2 Years of Study at CAAT (or equivalent) diploma program

6) Diploma in Protection, Security and Investigation (formerly Law and Security) (Two Year Diploma): Graduates of the two-year Diploma in **Protection, Security and Investigation** program with a cumulative average grade of B or better may receive credit equivalent to five courses (15.00 credits) toward a B.A. or B.S.W. degree. Transfer credit is awarded for approved courses with a minimum grade of B- or better.

7) Child and Youth Care (formerly Child and Youth Worker), **Developmental Services Worker, Early Childhood Education, Educational Support, Social Services Worker:** Graduates of these College of Applied Arts and Technology diploma programs with an overall B average or better may be admitted into second year of the Disability Studies program. Graduates of related Education, Community and Social Services programs may be admitted with Disability Studies Program Coordinator (or their designate) approval. (Please refer to the **BA Honours in Disability Studies for College of Applied Arts and Technology Graduates** for more details)

8) Labour Studies Degree Completion Programs:
General Labour Studies program for Graduates from College of Applied Arts and Technology who have completed a Business Administration diploma
Honours Labour Studies program for Graduates from College of Applied Arts and Technology who have completed a Business Administration diploma *(Note: As of Fall 2013, there are no new admissions to this program)*
General Labour Studies (with Human Resources Certificate from a College of Applied Arts and Technology)
Honours Labour Studies (with Human Resources Certificate from a College of Applied Arts and Technology) *(Note: As of Fall 2013, there are no new admissions to this program)*

9) Early Childhood Education Diploma: Students who have completed the Diploma in Early Childhood Education with an overall average of at least B (3.0) will normally receive a minimum of ten course equivalents toward a B.A. or B.S.W degree in the Faculty of Arts, Humanities and Social Sciences. Students will

receive credit on the basis of a General Approved Course List or for courses on a Specific Approved Course List that they passed with a minimum grade of C. Refer to the Faculty of Arts, Humanities and Social Sciences for approved course lists. Students must meet all regular requirements for the program they choose; the number of course credits applied toward program requirements will vary depending on program choice. Students whose Early Childhood Education diploma program includes transfer credits for previously completed university courses will normally receive a minimum of 10 university credits in accordance with the above provisions.

NB: Should changes in the courses offered or required at either institution necessitate changes to the specific courses mentioned in the agreement, with the agreement of the respective Deans' offices the list of course included in the agreement can be modified by the appropriate University of Windsor Department in consultation with the Registrar's office. The changes have to be submitted to the appropriate Faculty.

10) Developmental Services Worker Diploma: Graduates of the Developmental Services Worker program who have a cumulative grade point average equivalent to B (3.0) or better will normally receive credit equivalent to a minimum of ten courses toward a B.A. or B.S.W. degree in the Faculty of Arts, Humanities and Social Sciences. Students will receive credit on the basis of a General Approved Course List or for courses on a Specific Approved Course List that they passed with a minimum grade of C. Refer to the Faculty of Arts, Humanities and Social Sciences for approved course lists. Students must meet all regular requirements for the program they choose; the number of course credits applied toward program requirements will vary depending on program choice. Students whose Developmental Services Worker diploma program includes transfer credits for previously completed university courses will normally receive a minimum of 10 university credits in accordance with the above provisions.

NB: Should changes in the courses offered or required at either institution necessitate changes to the specific courses mentioned in the agreement, with the agreement of the respective Deans' offices the list of course included in the agreement can be modified by the appropriate University of Windsor Department in consultation with the Registrar's office. The changes have to be submitted to the appropriate Faculty.

11) Child and Youth Care (formerly Child and Youth Worker Diploma)**:** Students who have completed the Child and Youth Care Diploma program with a cumulative average grade of B (3.0) or better will normally receive a minimum of 15 university credits toward a B.A. or B.S.W. degree in the Faculty of Arts, Humanities and Social Sciences. Students will receive credit on the basis of a General Approved Course List or for courses on a Specific Approved Course List that they passed with a minimum grade of C. Refer to the Faculty of Arts, Humanities and Social Sciences for approved course lists. Students must meet all regular requirements for the program they choose;-the number of course credits applied toward program requirements will vary depending on program choice. Students whose Child and Youth Care diploma program includes transfer credits for previously completed university courses will normally receive a minimum of 15 university credits in accordance with the above provisions.

NB: Should changes in the courses offered or required at either institution necessitate changes to the specific courses mentioned in the agreement, with the agreement of the respective Deans' offices the list of course included in the agreement can be modified by the appropriate University of Windsor Department in consultation with the Registrar's office. The changes have to be submitted to the appropriate Faculty.

12) Child and Youth Care Diploma (formerly Child and Youth Worker Diploma)**:** Graduates of all Ontario College Child and Youth Care diploma programs completed in 1996 or later with a cumulative average equivalent to a B (73%) or better will be eligible for entry into Disability Studies and Psychology **Degree Completion Programs for CYC Graduates** and are eligible to apply for entry into the Honours Bachelor of Social Work for CYC Graduates. Completion of these programs will normally require three semesters of full-time study (for General BA degree completion programs) or four semesters of full-time study (for Honours BA and BSW degree completion programs). Students may enroll in these programs in Summer, Fall or Winter semesters. Students are strongly advised to consult with a Disability Studies, Psychology or Social Work academic advisor before registering for courses in these programs. (Disability Studies Degree Complete Program for CYC Graduates; Psychology Degree Complete Program for CYC Graduates; Social Work Degree Complete Program for CYC Graduates)

13) Social Service Worker Diploma: Students who have completed a Social Service Worker Diploma program recognized by and making them eligible for registration with the Ontario College of Social Workers and Social Service Workers with a cumulative average grade of B (3.0 or 70%) or better will normally receive a minimum of 10 university credits toward a B.A. degree or B.S.W. degree in the Faculty of Arts, Humanities and Social Sciences. Students will receive credit on the basis of a General Approved Course List or for courses on a Specific Approved Course List that they passed with a minimum grade of C (or 63%). Refer to the Faculty of Arts, Humanities and Social Sciences for approved course lists. Students must meet all regular requirements for the program they choose; the number of course credits applied toward program requirements will vary depending on program choice. Students whose Social Service Worker diploma program includes transfer credits for previously completed university courses will normally receive a minimum of 10 university credits in accordance with the above provisions.

NB: Should changes in the courses offered or required at either institution necessitate changes to the specific courses mentioned in the agreement, with the agreement of the respective Deans' offices the list of course included in the agreement can be modified by the appropriate University of Windsor Department in consultation with the Registrar's office. The changes have to be submitted to the appropriate Faculty.

DURHAM COLLEGE

1) Human Kinetics Degree Completion Program:
Bachelor of Human Kinetics (Honours Kinesiology) with Sport Management Major for Graduates of Durham College's Sport Management Program

FANSHAWE COLLEGE OF APPLIED ARTS AND TECHNOLOGY

1) Fine Art Program: Graduates of Fanshawe College who have completed a three-year Fine Art program may apply for transfer into an appropriate level of the Honours Bachelor of Fine Arts (Visual Arts) program. Transfer students must satisfy University regulations for transfer from CAATs and meet the academic requirements and standards of the B.F.A. program. Completion of the B.F.A. program in Visual Arts will normally require four terms of academic work or the equivalent at the University of Windsor. For further information, contact Visual Arts.

2) Recreation and Leisure Services Program: Students who have completed the two-year Recreation and Leisure Services Diploma Program at Fanshawe College with a cumulative average grade of B may receive up to ten Kinesiology credits to be determined by the Faculty of Human Kinetics, provided they passed the respective college courses with a grade of B- or better.

GEORGE BROWN COLLEGE OF APPLIED ARTS AND TECHNOLOGY

1) Performing Arts Program: Graduates of the George Brown College three-year Diploma program in Performing Arts with a cumulative average of B may gain admission to the third year of the B.F.A. in Acting program. A letter of recommendation from the Coordinating Director of the George Brown Theatre Program and a successful placement audition are also required. Completion of the B.F.A. will normally require four semesters of full-time study. Students may be required to take courses at the first or second year level if their audition indicates a need for such courses. Students who graduated from George Brown two or more years prior to application to the University of Windsor are subject to a placement audition before they can be covered by this agreement.

GEORGIAN COLLEGE OF APPLIED ARTS AND TECHNOLOGY

1) Fine Arts Program: Graduates of the three-year Diploma program in Fine Arts with a cumulative average of 2.7 (B) may gain admission to the third year of the B.F.A. Visual Arts program. Two letters of recommendation, a letter of intent and a successful portfolio are also required.

HUMBER COLLEGE INSTITUTE OF TECHNOLOGY AND HIGHER LEARNING

1) Theatre Performance Program: Graduates of the Humber College three-year Diploma program in Theatre Performance with a cumulative average of B may gain admission to the third year of the B.F.A. Acting program. A letter of recommendation from the Artistic Director of the Humber College Theatre Performance program and a successful placement audition are also required.

Completion of the B.F.A. will normally require four semesters of full-time study. Students may be required to take courses at the first or second year level if their audition indicates a need for such courses. Students who graduated from Humber College two or more years prior to application to the University of Windsor are subject to a placement audition before they can be covered by this agreement.

LAMBTON COLLEGE OF APPLIED ARTS AND TECHNOLOGY

Note: Lambton College students who have completed Lambton College Communications I (ENG 1113) will receive transfer credit for University of Windsor Effective Writing I (01-01-150); and, Lambton College students who have completed Lambton College Communications II (ENG 2113) will receive transfer credit for University of Windsor Effective Writing II (01-01-151), on the understanding that transfer credits given for one or both of these courses will not increase the number of transfer credits to which they are entitled according to the articulation or degree completion agreement nor decrease the number of courses they must complete in order to earn a University of Windsor degree.

1) Chemical Engineering Technology Program: A student may enter a Bachelor of Science program after completing the three-year Diploma in Chemical Engineering Technology. Depending upon the selected level and area of study, the student may receive the equivalent of seventeen courses from Chemistry and Biochemistry.

2) Environmental Technology Program: A student may enter a Bachelor of Science program after completing the three-year Diploma in Environmental Technology. Depending upon the selected level and area of study, the student may receive the equivalent of nineteen courses from Chemistry and Biochemistry.

3) Medical Laboratory Science Program: Graduates of the three-year Diploma in Medical Laboratory Science with a 3.0 G.P.A. (75 percent or equivalent) may receive the equivalent of seventeen semester course credits towards the Bachelor of Science degree in Biological Sciences, Biochemistry, or General Science.

4) Industrial Hygiene Technology Program: A student may enter a Bachelor of Science program after completing the three-year Diploma in Industrial Hygiene Technology. Depending upon the selected level and area of study, the student may receive the equivalent of up to sixteen courses towards a Biological Sciences Degree, or up to twenty courses towards a Biochemistry degree.

5) Massage Therapy Program: A student may enter the Bachelor of Human Kinetics (Movement Sciences) program after completing the three-year Diploma in Massage Therapy with a minimum cumulative average equivalent to a B or better and a minimum cumulative grade of B or better for each college course or group of college courses for which transfer credit may be granted. Up to ten transfer credits may be given.

6) Police Foundations Program: A graduate of the two-year Diploma in Police Foundations program with a cumulative average grade of B or better and at least a grade of B- in specified College courses may receive up to one year (ten courses) of credit towards a B.A. or B.S.W. degree program in the Faculty of Arts, Humanities and Social Sciences.

7) Human Kinetics Degree Completion Program:
Bachelor of Human Kinetics (Honours Kinesiology) with Sport Management Major for Graduates of Lambton College's Sport and Recreation Administration program

8) Graduates of the One-Year Pre-Health Science-Nursing Program: A student with a minimum grade point average of 2.7 (B) and a minimum average of 2.7 (B) in BIO 120, BIO 220, CHM 125 and CHM 225, will be considered for admission to the B.Sc.N. program.

9) General Arts and Science Psychology Program: Students who have completed a two year high affinity General Arts and Science Psychology Stream diploma at Lambton College with a minimum cumulative average of 3.0 (Lambton College B) may enrol in any Bachelor of Arts or Bachelor of Social Work program offered at the University of Windsor. Students will receive the equivalent of up to 14 semester courses for all courses included in the Agreement on which they received a minimum average grade of 3.0) (Lambton College B).

10) Liberal and Professional Studies Degree Completion Programs
General Liberal and Professional Studies (for Lambton College General Arts and Science University (GASU) transfer students

Honours Liberal and Professional Studies (for Lambton College General Arts and Science University (GASU) transfer students)

MOHAWK COLLEGE OF APPLIED ARTS AND TECHNOLOGY

1) Medical Laboratory Science Program: Graduates of the three-year Diploma in Medical Laboratory Technology with a 3.0 G.P.A. (75% or equivalent) may receive the equivalent of seventeen semester course credits towards the Bachelor of Science degree in Biological Sciences, Biochemistry, or General Science.

ST. CLAIR COLLEGE OF APPLIED ARTS AND TECHNOLOGY

Note: Applicants who have graduated from a St. Clair College of Applied Arts and Technology program for which a transfer agreement exists with the University of Windsor who have completed St. Clair College Foundations of Academic Writing I (FAW 100) and/or St. Clair College Foundations of Academic Writing II (FAW 105) will receive transfer credit for University of Windsor Effective Writing I (01-01-150) and/or University of Windsor Effective Writing II (01-01-151). These transfer credits will be included in the maximum number of transfer credits specified in the existing transfer agreement.

1) Diploma in Journalism and BA Communication, Media and Film : St. Clair College graduates of the Diploma in Journalism with a minimum B-(2.7) average who have successfully completed the St. Clair courses may receive up to 10 course credits toward the requirements of a BA (General or Honours) in Communication, Media, and Film, from the University of Windsor. Credit will be awarded only if the St. Clair course was completed with a grade of B- (2.7) or better.Transfer students have to fulfill the regular degree requirement for the General or Honours BA (single or combined) in Communication, Media, and Film, including the residency and senior course requirement.

2) Chemical Engineering Technology Program: A student may enter a Bachelor of Science program after completing the three year Diploma in Chemical Engineering Technology. Depending upon the selected level and area of study, the student may receive the equivalent of seventeen semester course credits from Chemistry and Biochemistry.

3) Medical Laboratory Science Program: Graduates of the three-year Diploma in Medical Laboratory Science with a 3.0 G.P.A. (75% or equivalent) may receive the equivalent of seventeen semester course credits towards the Bachelor of Science degree in Biological Sciences, Biochemistry, or General Science.

4) Business Administration Information Systems: Graduates of this program with a 3.0 G.P.A. or better, who have completed specific courses will be considered for admission to the General Bachelor of Computer Science on an individual basis, subject to the approval of the Dean of Science, and may receive up to fifteen semester course equivalents.

5) Mechanical Engineering Technology - Automotive Product Design Program: Graduates of the Mechanical Engineering Technology - Automotive Product Design program in the year 2001 or later, with a cumulative G.P.A. of B or better, with B grades in the fifteen core diploma program subjects, and with no grades below C on their College record, will be granted advanced standing in 14 semester courses towards the Bachelor of Applied Science in Mechanical Engineering (Automotive Engineering Option) degree. See department for list of courses.

6) One-Year Pre-Health Science - Nursing Program: Students at St. Clair College who successfully complete the one-year Pre-Health Science-Nursing certificate with a minimum overall grade point average of 2.7 (B) and a minimum science subject average of 2.7 (B) in GAS 11, GAS 21, GAS 11A and GAS 21A, will be considered for admission to the B.Sc.N. program.

7) Dental Hygiene Diploma: Students who have completed the two-year Diploma in Dental Hygiene with a cumulative average grade of B may receive up to five university credits for the following courses (or their equivalents), to apply toward any degree program in the Faculty of Arts, Humanities and Social Sciences, provided they passed the respective college courses with a grade of B- or better: Communication Across Cultures, Anatomy and Physiology II, Ethics and Professionalism, Basic Psychology, Three additional Dental Hygiene courses with a B average.

8) Police Foundations Program: A graduate of the two-year Diploma in Police

Foundations program with a cumulative average grade of B or better and at least a grade of B- in specified College courses may receive up to one year (ten courses) of credit towards a B.A. or B.S.W. degree program in the Faculty of Arts, Humanities and Social Sciences.

9) Civil Engineering Technology Program: Students who have completed the three-year Diploma Program at St. Clair College in Civil Engineering Technology with a cumulative average grade of B (70%) or better may receive credit for up to 16 specified semester courses provided they have passed the respective college courses with a grade of B (70%) or better.

10) Social Work and Disability Studies Degree Completion Programs

11) Psychology Degree Completion Programs

12) Chemical Laboratory Technology Program: Students who graduate from the Chemical Laboratory Technology Program with a cumulative GPA of (3.0) or better will be awarded seventeen (17) semester transfer credits towards the Bachelor of Science (Honours Chemistry and Honours Chemistry with Thesis), or awarded sixteen (16) credits towards the Bachelor of Science (Honours Biochemistry and Honours Biochemistry with Thesis).

SENECA COLLEGE

1) Liberal Arts Diploma (Two Year Diploma): Graduates of the two-year Liberal Arts diploma program from Seneca College may receive transfer credit for up to ten courses. Transfer credit is awarded for approved courses with a minimum grade of B.

SHERIDAN COLLEGE INSTITUTE OF TECHNOLOGY AND ADVANCED LEARNING

1) Craft and Design Program: Graduates of Sheridan College who have completed a three-year Craft and Design program may apply for transfer into an appropriate level of the Honours Bachelor of Fine Arts (Visual Arts) program. Transfer students must satisfy University regulations for transfer from CAATs and meet the academic requirements and standards of the B.F.A. program. Completion of the B.F.A. program in Visual Arts will normally require four terms of academic work or the equivalent at the University of Windsor. For further information, contact Visual Arts.

SIR SANDFORD FLEMING COLLEGE OF APPLIED ARTS AND TECHNOLOGY

1) One-Year General Arts and Science Program: Students who have completed the one-year certificate in General Arts and Science from Sir Sandford Fleming with a cumulative average grade of B may receive up to five university course credits, provided they passed the respective college courses with a grade of B- or better. The course credits received will be applicable to any BA/BSW program in the Faculty of Arts, Humanities and Social Sciences, and students would have to meet all regular requirements for the respective major of their choice.

UNIVERSITY - TO - COLLEGE AGREEMENTS WITH ST. CLAIR COLLEGE OF APPLIED ARTS AND TECHNOLOGY
University of Windsor graduates may obtain advanced standing into certain diploma programs offered by St. Clair College.

FORMAL UNIVERSITY/COLLEGE AGREEMENTS WITH OTHER INSTITUTIONS

ONTARIO

Academy Of Learning
Graduates of selected Academy of Learning diploma programs with a cumulative average of seventy-five percent or better may receive advanced standing (transfer credit) for specified courses in Computer Science and/or Business Administration provided that they qualify for admission under any of the policies listed under "Admission Requirements".

McMaster University
Students who have successfully completed the Labour Studies Certificate program will receive five 100-level unspecified course credits in the Faculty of Arts, Humanities and Social Science programs at the University of Windsor. Students will still have to qualify for admission to the University based on the normal

admission standards and students will be able to register in any program within the Faculty of Arts, Humanities and Social Science.

National Theatre School
Graduates of the National Theatre School three-year Certificate program in Acting may gain admission to the third year of the B.F.A. in Acting program. A letter of recommendation from the Head of the National Theatre School and a successful placement audition are required. Completion of the B.F.A. will normally require four semesters of full-time study. Students may be required to take certain academic courses, as well as performance courses at the first or second year level if their audition indicates a need for such courses. Students who graduated from the National Theatre School two or more years prior to application to the University of Windsor are subject to a placement audition before they can be covered by this agreement.

BRUNEI

University Brunei Darussalam (UBD)
Honours Biology and Biotechnology program: Students will be admitted into this program at UBD with three A-levels or equivalent in Chemistry, Biology, and Mathematics with grades of C, or higher. Students completing specified UBD courses with a cumulative average of C+ (65%) or higher and who have completed the University of Windsor course 03-59-263-91 (Distance Education version of Organic Chemistry of Biomolecules) with a grade of B- or higher, will be eligible for transfer directly into the third year of the Honours Biology and Biotechnology program at the University of Windsor. Students must meet the University of Windsor's English language competency requirements and admission requirements before enrolling in 03-59-263-91. Successful transfer students will be considered to have all the prerequisites necessary for continuation in the program, and will receive credit for nineteen specified University of Windsor courses.

CHINA

Anshan University of Science and Technology
Anshan will accept students into a program leading to a degree granted by that institution. This program will be designed so as to provide the Anshan students with the option of transferring to the University of Windsor, to complete 10 or more University of Windsor credits and to be granted a University of Windsor Bachelor of Arts (Economics) or Bachelor of Arts (Honours Economics).

Students who complete at least one year of an undergraduate program at Anshan University of Science and Technology, with a G.P.A. of 7.0 (C+) or its equivalent at Anshan University, can apply for admission to an undergraduate program in Economics at the University of Windsor. Transferring students whose native language is not English must complete an English Proficiency Test administered by either the English Language Institute of the University of Michigan or, Test of English as a Foreign Language (T.O.E.F.L.).

Political Science Degree Completion Programs
General Political Science for Hebei Law and Politics College Graduates
Honours Political Science for Hebei Law and Politics College Graduates

EGYPT

Canadian International College
The University of Windsor's Computer Science B.C.S (Honours Applied Computing) degree program and the Computer Science B.C.S (General) degree program is offered through the Canadian International College (CIC), Egypt.

Articulation Agreements between the University of Windsor's Bachelor of Computer Science (General) and Bachelor of Computer Science (Honours Applied Computing) *(for graduates of CIC Cairo BETCH Four-Year Degree)*

HONG KONG

Hong Kong Baptist University (HKBU)
Students who have completed the two-year Associate Degree program of the College of International Education at HKBU with a cumulative average grade of B and who are otherwise admissible to the University of Windsor, including meeting the University of Windsor's English competency requirements, will receive University of Windsor credits, up to a total of twenty (20) semester courses, provided they passed the respective college courses with a grade of C- or better.

Students will not be restricted to enrolling in a specific program but must present the necessary prerequisites for entry into the program of their choice.

UNITED STATES

Broward Community College
Students who have completed a minimum of 60 credit hours in either the Arts or Science streams of the Centre for American Education (CAE) program with a cumulative average grade of B and who are otherwise admissible to the University of Windsor, including meeting the University of Windsor's English competency requirements, will receive University of Windsor credits, up to a total of twenty semester courses, provided they passed the respective college courses with a grade of C- or better. Students will not be restricted to enrolling in a specific program but must present the necessary prerequisites for entry into the program of their choice.

Owens College
A student who completes an Associate degree at Owens Community College with a grade point average of 2.7 or higher will be accepted by the University of Windsor with advanced standing in up to 20 semester courses in a Bachelor's degree program.

MALAYSIA

Kolej Damansara Utama (KDU) College
Students who have completed a minimum of 60 approved credit hours in either the Arts or Science stream of the School of American University Studies program at any campus of KDU (Malaysia) with a cumulative average grade of B and who are otherwise admissible to the University of Windsor, including meeting the University of Windsor's English competency requirements, will receive University of Windsor credits, up to a total of twenty semester courses, provided they passed the respective college courses with a grade of C- or better. Students will not be restricted to enrolling in a specific program but must present the necessary prerequisites for entry into the program of their choice.

Taylor’s College
A student who completes the American Degree Program at Taylor's College with a G.P.A. of 2.7 (B-) or higher will be accepted by the University of Windsor with advanced standing in up to 20 semester courses in an appropriate Bachelor's degree program. Excluded from this agreement is any provision for transfer from the Engineering Stream in the American Degree Program to the Bachelor of Applied Science degree at the University of Windsor.

SINGAPORE

Overseas Family College
Students who have completed the two-year Diploma program at Overseas Family College with a cumulative average grade of B and who are otherwise admissible to the University of Windsor, including meeting English competency requirements, will receive University of Windsor credits, up to a total of twenty, provided they passed the respective college courses with a grade of C- or better. Students will not be restricted to enrolling in a specific program. The course credits received will be applicable to any Bachelor's program providing the degree requirements of that program allow it. Students will have to meet all regular requirements for the major of their choice.

INDIA

Ansal Institute of Technology
Students who complete two years of study at Ansal Institute of Technology following a prescribed list of courses as defined by this agreement (contact Office of the Registrar for details) may be eligible to enter the third year of the Bachelor of Computer Science (Honours) degree. Students will be required to have obtained a grade of at least 2.4 (C-) or greater in every course taken at AIT, a cumulative grade point average of at least 2.8 (B-) or greater over all computer science courses taken at AIT and, satisfied the University of Windsor’s English competency requirements to be eligible for consideration under this agreement.

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CERTIFICATE PROGRAMS

Certificate in Arts Management

Certificate in Business Administration

Certificate in Border Management and International Trade

Certificate in Work and Employment Issues **(General stream or CHRP Designation stream)**

Certificate in Law and Politics

Certificate in North American Studies

Certificate in Public Administration

Certificate in Second Language Education

Certificate in Women's Studies

Certificate in Applied Information Technology

Post Baccalaureate/Post Graduate Certificate programs:

Honours Certificate in Civil Engineering

Honours Certificate in Electrical Engineering

Honours Certificate in Environmental Engineering

Honours Certificate in Industrial and Management Engineering

Post Graduate Certificate in Accounting

UNDERGRADUATE REGULATIONS: CERTIFICATE PROGRAMS (definition and policy)

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Minors (Listed Alphabetically)

Anthropology
Anthrozoology
Applied Information Technology
Arabic Studies
Art History/Visual Culture
Biochemistry
Biological Sciences
Business Administration
Chemistry
Child Psychology
Communication, Media, and Film
Computer Science
Diaspora Studies
Disability Studies
Economics
English Language and Literature
Earth Science
Environmental Science
Family and Social Relations
Forensic and Cultural Anthropology
French Studies
Geography
Greek and Roman Studies
History
Jewish Studies
Labour Studies
Latin American Studies
Linguistics and Literature
Mathematics
Modern Languages (Concentration in Language)
Modern Languages (Concentration in Language and Culture)
Modern Languages (Concentration in Linguistics and Literature)
Music
Organizational Learning and Teaching
Philosophy
Physics
Political Science
Psychology
Social Justice
Sociology
Statistics
Studies of Sexuality
Women's Studies

UNDERGRADUATE REGULATIONS: **MINORS**

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Courses (Listed Alphabetically by Department/Program Area)

Listed Alphabetically by Department/Program Area

Aeronautics Leadership (02-xxx) (within the Department of Faculty of Arts, Humanities and Social Sciences)
Anthropology (48-xxx 49-xxx) (within the Department of Sociology, Anthropology and Criminology)
Anthrozoology (51-xxx) (within Inter-Faculty Programs)
Arts and Sciences (56-xxx) (within Inter-Faculty Programs)
Biological Sciences (55-xxx)
Business (70-xxx, 71-xxx, 72-xxx, 73-xxx, 74-xxx, 75-xxx)
Chemistry and Biochemistry (59-xxx)
Cross Border Management and International Trade (69-xxx) (within Inter-Faculty Programs)
Greek and Roman Studies (11-xxx, 12-xxx, 13-xxx, 14-xxx) (within the Department of Languages, Literatures and Cultures)
Communication, Media and Film (40-xxx)
Computer Science (60-xxx)
Criminology (48-xxx) (within the Department of Sociology, Anthropology and Criminology)
Diaspora Studies (35-xxx) (within the School of Social Work)
Digital Journalism (30-xxx)(within Inter-Faculty Programs)
Disability Studies (37-xxx)
Disability Studies-Emphasis Courses
Dramatic Art (24-xxx)
Earth and Environmental Sciences (66-xxx, 67-xxx)
Economics (41-xxx)
Education (Pre-Service) (80-xxx)
Education (In-Service) (81-xxx)
Engineering - General (85-xxx)
Engineering - Civil and Environmental Engineering (87-xxx, 93-xxx)
Engineering - Electrical and Computer Engineering (88-xxx)
Engineering - Industrial and Manufacturing Systems Engineering (91-xxx)
Engineering - Mechanical, Automotive, and Materials Engineering (89-xxx, 92-xxx, 94-xxx)
English, Language, Literature and Creative Writing (26-xxx)
Environmental Studies (58-xxx)
Family and Social Relations (48-xxx, 49-xxx) (within the Department of Sociology, Anthropology and Criminology)
Forensic Science (57-xxx)
French Studies (29-xxx) (within the Department of Languages, Literatures and Cultures)
General Arts and Social Sciences (01-xxx, 02-xxx)
Geography (42-xxx)
History (43-xxx)
International Relations and Development Studies (45-xxx) (within the Department of Political Science)
Inter-Faculty (includes Arts and Sciences (56-xxx), Anthrozoology (51-xxx), Digital Journalism (30-xxx) Environmental Studies (58-xxx), Forensic Science (57-xxx), Cross Border Management and International Trade (69-xxx), Organizational Learning and Teaching (14-80-XXX)
Kinesiology *(Human Kinetics)* (95-xxx)
Labour Studies (54-xxx)
Languages, Literatures and Cultures (includes Greek and Roman Studies, French Studies, Modern Languages) (06-xxx, 07-xxx, 08-xxx, 10-xxx, 11-xxx, 12-xxx, 13-xxx, 14-xxx, 15-xxx, 21-xxx, 23-xxx, 29-xxx)
Law (98-xxx, 99-xxx)
Mathematics and Statistics (62-xxx, 65-xxx)
Modern Languages (15-xxx, 21-xxx, 23-xxx) (within the Department of Languages, Literatures and Cultures)
Music (32-xxx, 33-xxx) (within the School of Creative Arts)
Nursing
Organizational Learning and Teaching (within Inter-Faculty Programs) (14-80-XXX)

Philosophy (34-xxx)
Physics (64-xxx)
Political Science (includes International Relations and Development Studies) (45-xxx)
Psychology (46-xxx)
Social Justice Studies (38-xxx)
Social Work (47-xxx)
Sociology (48-xxx) (within the Department of Sociology, Anthropology and Criminology)
Sociology, Anthropology and Criminology (includes Family and Social Relations) (48-xxx)
Visual Arts (27-xxx, 28-xxx, 39-xxx) (within the School of Creative Arts)
Visual Arts and the Built Environment (36-xxx) (within the School of Creative Arts)
Women's-Emphasis Courses
Women's Studies (53-xxx)

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STUDENT EXCHANGE PROGRAMS

The University of Windsor is a party to a number of multilateral and bilateral agreements with universities in other countries, which permit University of Windsor students to attend other institutions for periods up to one academic year as part of their degree program at Windsor. Courses taken while participating under one of these agreements are treated as if they were taken at the University of Windsor, and do not require a Letter of Permission.

Many agreements are open as to field of study, while others are intended for students in specific disciplines. In some (but not all) cases proficiency in a second language is required for participation. Other conditions of eligibility also vary from program to program.

Current agreements for exchange study are listed below, with field of study and language of instruction; for further information, including application procedures, contact Exchange Office (exchange@uwindsor.ca) or go to www.uwindsor.ca/exchange.

Australia
Deakin University - Open (priority to Human Kinetics) - English
Victoria University - Open - English
Central Queensland University - Open - English
Charles Darwin University - Open - English
University of Tasmania - Open - English
La Trobe - Open - English

Canada
Université du Québec à Montréal - French Majors, Law - French

Chile
Universidad de Santiago de Chile

France
Rouen Business School - Business - English and French
Ontario/Rhône-Alpes Exchange - (14 Universities) - Open - French
Université Jean Monnet - Open - French
Canadian Third Year in Nice Program - French Majors - French
ESC Djion - Burgundy School of Business - Business - French & English
Université François-Rabelais (Tours) - Open - French
Université Jean Moulin (Lyon 3) - Open - French (Law - English)

Germany
Bielefeld University of Applied Sciences - Business - German, English
Ontario/Baden - Württemberg Exchange - (9 Universities) - Open - German
University of Mannheim - Open - English & German
Bayreuth University - Open - English & German

India
Ontario Maharashtra-Goa Exchange (various Universities) - Open - English

Italy
University of Udine (l'Università degli Studi di Udine) - Open - Italian
University of Cassino (Università degli Studi di Cassino) - Open - Italian

Japan
International Christian University - Open - English
Akita International University - International Relations and Business - English, Japanese

Jamaica
University of the West Indies, Mona Campus - Open - English

Mexico
Autonomous University of Guadalajara - Open - Spanish

Netherlands
Arnhem Business School - Business - English

New Zealand
Victoria University of Wellington - Open - English
Unitec Institute of Technology - Open - English
University of Waikato - Open - English

People's Republic of China
Hong Kong Polytechnic University - Business - English
Ontario-Jiangsu Program (OJS) - Open - English

South Africa
Rhodes University - Open - English

South Korea
Ewha Womens University - Open - English

Spain
Universidad Publica de Navarra - Open - Spanish
Universidad de Valladolid - Open - Spanish

Sweden
Jönköping University - Business, CMF, Engineering, Nursing - English
University of Karlstad - Open - English

Switzerland
University of Lucerne - Law (in English), Humanities & Social Sciences (in German)

United Kingdom
Coventry University - Open - English
University of Derby - Open - English
Keele University - Open - English
Kingston University - Open - English
University of Hertfordshire - Open - English
University of Leicester - Open - English
University of Plymouth - Open (priority to Dramatic Art) - English
Southampton Solent University - Open - English
Swansea University - Open - English

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FACULTY OF ENGINEERING

BACHELOR OF ENGINEERING TECHNOLOGY (BEng Tech), *General Stream*
BACHELOR OF ENGINEERING TECHNOLOGY (BEng Tech), *Mechanical Stream*
BACHELOR OF ENGINEERING TECHNOLOGY (BEng Tech), *Civil Stream*

ADMISSION REQUIREMENTS for General, Mechanical and Civil Streams

1. For Canadian Colleges (CAAT or equivalent), Graduating Cumulative Average of 70%.
2. For international colleges (equivalent to CAAT's advanced diploma), Graduating Cumulative Average of 80% and minimum English language requirement as per University policy.
3. For Canadian University degree holders who are seeking technology designation, 70%.
4. For international university degree holders who are seeking technology designation, 80% and minimum English language requirement as per University policy.
5. For individuals who have completed the equivalent of three years of an engineering degree from a recognized international institution, cumulative average of 80%, or first class honour, or equivalent; and minimum English language requirements as per University policy.

Remark 1:
Students applying to Bachelor of Engineering Technology (Mechanical) must have received an advanced diploma in Mechanical Engineering Technology (or equivalent as stated in 1 and 2 above).
Students applying to Bachelor of Engineering Technology (Civil) must have received an advanced diploma in Civil Engineering Technology (or equivalent as stated in 1 and 2 above).

Remark 2:
Students, who received a four year degree in a technical subject in Science, if admitted into BEngTech program, may be asked to take additional courses beyond the minimum requirements, and up to four courses in their original degree can be counting towards the BEngTech program, if appropriate.

PROGRAM REQUIREMENTS

Bachelor of Engineering Technology (BEng Tech), *General Stream*

Total courses: A minimum 15 courses as follows:
Two 100 level courses, six 200 level courses, three 300 level courses, and four 400 level courses. A higher level course can replace a lower level course but the reverse is only allowed under extenuating circumstances. The students are encouraged to take more 300 and 400 level courses.

NOTE: Due to the curriculum change in Engineering, some 200 level courses are offered during the third year, and some 300 level courses are offered during the fourth year of studies.

Suggested Courses:

Fall Courses
85-212 Thermodynamics
85-232 Engineering Software Fundamentals
85-234 Electrical and Computing Fundamentals
85-250 Engineering and the Environment
85-222 Treatment of Experimental Data
85-233 Fluid Mechanics I
85-313 Engineering Economy
87-353 Structural Analysis I
87-482. Planning and Construction Management
89-450 Welding Engineering
91-201 Engineering Management and Globalization

Winter Courses

85-219 Engineering Materials
85-230 Advanced Engineering & Design
85-222 Treatment of Experimental Data
85-421 Engineering and Society
87-220 Civil Engineering Information Systems
91-302 Health, Safety and Human Factors
91-311 Computer Aided Design and Computer Aided Manufacturing
92-412 Mechatronics (Laboratory Based)

Summer Courses
85-421 Engineering and Society
85-483 Engineering Report
87-365 Transportation and Traffic Engineering
92-320 Fundamentals of Automotive Engineering
93-481 Sustainability and Engineering

Bachelor of Engineering Technology (BEng Tech) ***Mechanical Stream***

Total courses:
A minimum 20 courses as follows:

Fall Courses
85-212 Thermodynamics
85-222 Treatment of Experimental Data
85-232 Engineering Software Fundamentals
85-233 Fluid Mechanics 1 (or 87-351 Fluid Mechanics)
85-250 Engineering & the Environment

Winter Courses
85-218 Mechanics of Deformable Bodies
85-220 Numerical Analysis for Engineering
85-230 Advanced Engineering & Design
85-219 Engineering Materials
Technical Elective 1

Technical electives
- *94-461 Design for Manufacturability*
- *91-302 Health, Safety, & Human Factors*
- *91-327 Product Quality & Reliability*
- *91-311 CAD/CAM*
- *87-472 Hydraulics*

Summer Courses
92-317 Applied Thermodynamics
92-428 Sustainability in Engineering
92-455 Environmental Effects & Control of Noise
85-421 Engineering and Society
Technical Elective 2

Technical Electives
- *92-324 Engineering Measurements*
- *92-459 Computer Aided Engineering*
- *94-370 Aerospace Engineering Fundamentals*
- *94-330 Automotive Engineering Fundamentals*
- *89-330 Materials and their Properties*

Fall Courses
85-313 Engineering Economics
91-321 Manufacturing Process Design
92-311 Stress Analysis (or 87-352 Stress Analysis)
Technical Elective 3
Technical Elective 4

Technical Electives
- *91-315 Product & Process Design*
- *91-201 Management and Globalization*
- *91-428 Facilities Design and Logistics*
- *92-210 Dynamics*
- *89-450 Welding Engineering*

Bachelor of Engineering Technology (BEng Tech) ***Civil Stream***

Total courses:
A minimum 20 courses as follows:

Fall Courses
85-222 Treatment of Experimental Data
85-232 Engineering Software Fundamentals
85-250 Engineering & the Environment
87-351 Fluid Mechanics (or 85-233 Fluid Mechanics I)
Technical Elective 1

Technical electives
- *92-210 Dynamics**
- *91-201 Management and Globalization*
- *85-111 Engineering Mechanics I*

Winter Courses
85-218 Mechanics of Deformable Bodies
87-220 Civil Engineering Information Systems
87-219 Materials in Civil and Environmental Eng.
85-421 Engineering & Society
Technical Elective 2

Technical electives
- *93-363 Water and Wastewater treatment*
- *93-471 Water Distribution and Wastewater Coll. Sys.*
- *87-472 Hydraulics*
- *91-302 Health, Safety, & Human Factors*

Summer Courses
85-119 Technical Communication
93-481 Sustainability in Engineering
92-455 Environmental Effects & Control of Noise
Technical Elective 3
Technical Elective 4

Technical Electives
- *87-365 Transportation and Traffic Engineering*
- *87-482 Planning and Construction Management*
- *87-481 Highway Design and Construction*
- *93-362 Air Pollution Control*

Fall Courses
85-313 Engineering Economics
87-352 Stress Analysis
87-354 Concrete Design
87-353 Structural Analysis
Technical Elective 5

Technical Electives
- *87-355 Geotechnical Engineering I*
- *92-320 Fluid Mechanics II*

ENGINEERING: GENERAL COURSES (85-)
CIVIL AND ENVIRONMENTAL ENGINEERING: COURSES (87- and 93-)
INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING: COURSES (91-)
MECHANICAL, AUTOMOTIVE AND MATERIALS ENGINEERING: COURSES (89-, 92-, 94-)

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COMPUTER SCIENCE

PROGRAMS

Bachelor of Computer Science (General)
Bachelor of Computer Science (Honours) (With or without Co-op)
Bachelor of Computer Science (Honours Applied Computing) (With or without Co-op)
Bachelor of Science (Honours Computer Information Systems)
Bachelor of Science (Honours Computer Science with Software Engineering Specialization) (With or without Co-op)
Concurrent Bachelor of Computer Science (Honours)/Bachelor of Education
Other Combined Honours Programs
Minor in Computer Science
Minor in Applied Information Technology
Major and Minor Concentrations - Bachelor of Arts and Science
Certificate in Applied Information Technology

DEGREE COMPLETION PROGRAMS

Bachelor of Computer Science (General) for University Graduates
Bachelor of Computer Science (Honours Applied Computing) for University Graduates
Bachelor of Computer Science (General) (for Qualifying Ontario and Other College Diploma Holders)
Bachelor of Computer Science (Honours Applied Computing) (with and without Co-op) (for Qualifying Ontario and Other College Diploma Holders)

ARTICULATION AGREEMENTS

Bachelor of Computer Science (General) (for graduates of CIC Cairo BETCH Four-Year Degree)
Bachelor of Computer Science (Honours Applied Computing) (for graduates of CIC Cairo BETCH Four-Year Degree)
Bachelor of Computer Science (General) (Co-op) for Qualifying Ontario CAAT (or equivalent) Students with 2 Years of Study at CAAT (or equivalent) diploma program
Bachelor of Computer Science (Honours Applied Computing) (Co-op) for Qualifying Ontario CAAT (or equivalent) Students with 2 Years of Study at CAAT (or equivalent) diploma program

Additional Information: Program and Cooperative Education Regulations
GENERAL UNDERGRADUATE REGULATIONS

Bachelor of Computer Science (General)

Total courses: thirty.

Major requirements: fourteen courses, including 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-322, 60-315, 60-330, 60-334 (or 60-367), plus two additional Computer Science courses.

The major average will be calculated on the basis of the grades obtained in 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-322, 60-315, 60-330, and either 60-334 or 60-367 or both.

Other requirements:
(a)62-120 (or 62-125), 62-130 (or 62-140 or 62-139), and 65-205;
(b)one course from Arts/Languages, and one from Social Sciences;
(c)eleven other courses from any area of study, including Computer Science.

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 60-100, 60-140, 60-141, 62-120 or 62-125, and 62-140 or 62-139 (or 62-130).
Second Year: ten courses, including 60-212, 60-254, 60-256, 60-265, 60-266, and 65-205.
Third Year: ten courses, including 60-315, 60-322, 60-330, and 60-334 (or 60-367).

Note: Students who plan to complete an Honours Computer Science degree at a

later date should restrict the number of Computer Science courses they take as options, in order to transfer seamlessly into a Computer Science Honours program. These students should consult a program advisor.

Bachelor of Computer Science (Honours)
(This program is available with or without co-op) See Program and Cooperative Education Regulations

Total courses: forty.

Major requirements: twenty-one courses, consisting of 60-100, 60-140, 60-141, 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, 60-266, 60-311, 60-315, 60-322, 60-330, 60-354, 60-367, 60-440, 60-454, 60-496 or 60-499 (both 6.0 credit hour courses), plus one additional Computer Science course at the 300 or 400 level.

The major average will be calculated on the basis of grades obtained in 60-100, 60-140, 60-141, 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, 60-266, 60-311, 60-315, 60-322, 60-330, 60-354, 60-367, 60-440, 60-454, and either 60-496 or 60-499.

Other requirements:
(a) 62-120 (or 62-125), 62-140 (or 62-139), 62-141, 62-190, 62-369 (or 62-380) and 65-205 (or 65-250);
(b)three courses from Arts, Languages or Social Sciences, with at least one from Arts/Languages and one from Social Sciences;
(c)three courses at the 200-400 level from Mathematics/Statistics or Computer Science (excluding 60-205, 60-207, 60-209, 60-270, 60-305, 60-307);*
(d) seven other courses from any area of study, including Computer Science.

It is recommended that students pursuing a Multi-media specialization should pick 6 courses (in consultation with an academic advisor) from Visual Arts and Communication, Media and Film.

**Specializations:* Students may specialize in one of the following areas. A special annotation will be made on the transcript for a specialization in one of the following areas, if the specified courses are completed:

i) Artificial Intelligence specialization: 60-371; (at least two of 60-477 (requires 60-377), 60-473, or 60-474); and 60-499 project course (or 60-496 Research Project) on an approved topic in Artificial Intelligence.
ii) Multi-media specialization: 60-350; 60-450; at least one of 60-334 and 60-352; and 60-499 project course (or 60-496 Research Project) on an approved topic in Multi-media.
iii) Networks and Security specialization: 60-467; at least two of 60-368, 60-334, and 60-468; and 60-499 project course (or 60-496 Research Project), on an approved topic in Networks and Security.
iv) Game Development specialization: One of (60-350 or 60-352) and 60-377, 60-477 and 60-499 project course (or 60-496 Research Project) on an approved topic in Game Development.

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 60-100, 60-140, 60-141, 62-120 or 62-125 , 62-140 or 62-139, 62-141 and 62-190.
Second Year: ten courses, including 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, 60-266, and 65-205 (or 65-250).
Third Year: ten courses, including 60-311, 60-315, 60-322, 60-330, 60-354, 60-367, and 62-369 (or 62-380).
Fourth Year: ten courses, including 60-440, 60-454, 60-499 (a 6.0 credit hour course).

Bachelor of Computer Science (Honours Applied Computing)
(This program is available with or without co-op)See Program and Cooperative Education Regulations

Total courses: forty.

Major requirements: Twenty-two courses consisting of 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-315, 60-321 or 60-340, 60-322, 60-330, 60-334, 60-367, 60-499 (6 credit course), 60-415, 60-422, 60-425, 60-426 or 60-420 and two other Computer Science major courses.

The major average will be calculated on the basis of grades obtained in 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-315, 60-321 or 60-340, 60-322, 60-330, 60-334, 60-367, 60, 415, 60-422, 60-425, 60-426 or 60-420,

and 60-499.

Other requirements:
(a) 62-120 (or 62-125), 62-130 (or 62-139 or 62-140), and 65-205
(b)One course from Arts/Languages, and one from Social Sciences
(c)Thirteen other courses from any area of study, including Computer Science

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 60-100, 60-140, 60-141, 62-120 (or 62-125), 62-140 (or 62-130 or 62-139).
Second Year: ten courses, including 60-212, 60-254, 60-256, 60-265, 60-266, and 65-205.
Third Year: ten courses, including 60-315, 60-321 or 60-340, 60-322, 60-330, 60-334, 60-367.
Fourth Year: ten courses, including 60-422, 60-425, 60-426 or 60-420, 60-499 (a 6.0 credit hour course).

Bachelor of Science (Honours Computer Information Systems)

Total courses: forty.

Major requirements - Computer Science: seventeen courses, consisting of 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-315, 60-322, 60-330, 60-334, 60-393 or 60-321 or 60-340, 60-499 (a 6.0 credit hour course), plus two additional Computer Science courses at the 300 or the 400 level.

The major average will be calculated on the basis of grades obtained in 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-315, 60-322, 60-330, 60-334, 60-321 or 60-393 or 60-340, 60-499, 70-151, 70-255, 75-100, 72-270, and 74-231.

Major requirements - Business: nine courses, including 70-151, 70-255, 75-100, 72-270, and 74-231 plus four additional Business courses, but excluding 73-101, 73-102, 73-213, 73-220 and 73-320.

Other requirements:
(a)62-120 (or 62-125), 62-130 (or 62-139 or 62-140), and 65-205;
(b)three courses from Arts, Languages or Social Sciences, with at least one from Arts/Languages and one from Social Sciences;
(c)six additional courses from any area of study excluding Business;
(d)41-110, 41-111.

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 41-110, 41-111, 60-100, 60-140, 60-141, 62-120 (or 62-125), 62-130 (or 62-140), 70-151, and 72-270.
Second Year: ten courses, including 60-212, 60-254, 60-256, 60-265, 60-266, 65-205, and 74-231, 70-255 and 72-270;
Third Year: ten courses, including 60-315, 60-322, 60-330, 60-334, and 60-393.
Fourth Year: ten courses, including 60-499 (a 6.0 credit hour course) and two Computer Science courses at the 300 or the 400 level.

Bachelor of Science (Honours Computer Science with Software Engineering Specialization)
(This program is available with or without co-op)See Program and Cooperative Education Regulations

Total courses: forty.

Major requirements - Computer Science: twenty-four courses, consisting of 60-100, 60-140, 60-141, 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, 60-266, 60-280, 60-311, 60-315, 60-322, 60-330, 60-354, 60-367, 60-411, 60-440, 60-454, 60-480, 60-496 or 60-499 (both 6.0 credit hour courses), plus one additional Computer Science course.

The major average will be calculated on the basis of grades obtained in 60-100, 60-140, 60-141, 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, 60-266, 60-280, 60-311, 60-315, 60-322, 60-330, 60-354, 60-367, 60-411, 60-440, 60-454, 60-480, and either 60-496 or 60-499.

Other requirements:
(a) 62-120 (or 62-125), 62-140 (or 62-139), 62-141, 62-190, and 65-250 (or 65-205);
(b) any four of 24-210, 26-140, 34-129, 34-228, 46-115, 75-100, or 71-240

(c) two courses from Arts, Languages or Social Sciences, including one from Arts/Languages and one from Social Sciences;
(d) four additional courses from any area of study, including Computer Science.
(e) one course at the 200-400 level from Mathematics/Statistics or Computer Science (excluding 60-205, 60-207, 60-209, 60-270, 60-305, 60-307).

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 60-100, 60-140, 60-141, 62-120 or 62-125, 62-140 or 62-139, 62-141 and 62-190.
Second Year: ten courses, including 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, 60-266, 60-280, and 65-250 (or 65-205).
Third Year: ten courses, including 60-311, 60-315, 60-322, 60-330, 60-354, 60-367.
Fourth Year: ten courses, including 60-411, 60-440, 60-454, 60-480, and 60-499 (a 6.0 credit hour course).

To remove any suggestion that the word "engineering," in the context of courses or programs in Computer Science implies the meaning of "engineering" as used in the context of courses or programs in Professional Engineering, it is hereby acknowledged that Software Engineering is a collection of principles, models, methods, and techniques for the development, maintenance, evolution, and reuse of software that meets fundamental performance and quality requirements in an economic and competitive manner.

Other Combined Honours Programs

Total courses: forty.

Major requirements - Computer Science: fourteen courses, consisting of 60-100, 60-140, 60-141, 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, 60-266, and 60-315; plus three additional Computer Science courses at the 300 level or above.

Major requirements - Other Subject: as prescribed by that area of study.

The major average will be calculated on the basis of grades obtained in 60-100, 60-140, 60-141, 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, 60-266, and 60-315 and those of major courses in the other area of specialization.

Other requirements:
(a) 62-120 (or 62-125), 62-140 (or 62-139), 62-141,62-190, 62-369 (or 62-380) and 65-205 (or 65-250);
(b)any additional, non-major requirements as determined by the second area of study;
(c)additional courses, if necessary, from any area of study to a total of forty courses.

Minor in Computer Science

The minor in Computer Science consists of the following courses in which students must maintain an average of 60% or better: 60-100, 60-140, 60-141, 60-212, and two of 60-205, 60-254, 60-256, or 60-265.

*NOTE: 60-205 has a prerequisite of 60-104. This is not part of the minor, but would have to be completed before taking 60-205.

Minor in Applied Information Technology

The minor in Applied Information Technology consists of 6 courses in which the student must maintain an average of 60% or better: 60-104, 60-106 or 60-140, 60-205, 60-207, and two of 60-270, 60-209, 60-305 and 60-307.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 60-100, 60-212, 60-254, 60-256, 60-265, 60-322, 60-315, 60-330, 60-334, 60-393, 60-367; one course at the 300-level or above. (Other requirements: 60-140, 60-141, 62-140, 62-141.)

Minor Concentration: 60-100, 60-212, 60-254, 60-256; one Computer Science course at the 200-level or above; and one Computer Science course at the 300-level or above. (Other requirements: 60-140, 60-141, 62-140, 62-141.)

Certificate in Applied Information Technology

Total courses: 8

The Certificate in Applied Information Technology consists of the following courses in which students must maintain an average of 60% or better: 60-104, 60-106 (or 60-140), 60-205, 60-207,60-209,60-270, 60-305, 60-307

DEGREE COMPLETION PROGRAMS FOR UNIVERSITY GRADUATES

Bachelor of Computer Science (General) for University Graduates

Total Courses: 16

University graduates with a three-year General, four-year Major or four-year Honours degree (from a discipline other than Computer Science) may apply to the B.C.S (General) degree for University Graduates. This second degree program is offered in two formats:

12-month Full time Degree Program (with Summer Entry)
Major requirements: thirteen courses including, 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-315, 60-322, 60-330, 60-334 or 60-367, plus one additional Computer Science course.

The major average will be calculated on the basis of grades obtained in 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-315, 60-322, 60-330, 60-334 and/or 60-367.

Other requirements: 62-120 or 62-125, 62-130 (or 62-140 or 62-139), and 65-205.

RECOMMENDED PROGRAM SEQUENCING (for 12 month completion)
This is a 16 course program. The normal course load is 5 courses per semester with the remaining course to be taken at any time, though it is recommended in the following sequence that it be taken in the last semester.

Summer
Intersession (6 week offering starting May): 60-140
Summer (6 week offering starting July): 60-141
12-week term (starting May): 60-100, 60-265 and 65-205

Fall
12 week offering starting September: 60-212
12 week offering: 60-254
12-week term: 60-256 and 60-266 and one of (62-120 or 62-125), or one of (62-130, 62-140 or 62-139).

Winter
12-week: 60-315, 60-322, 60-330, 60-334 or 60-367, Computer Science elective, remaining Math course.

Remaining math course may be taken at any time depending upon any applicable transfer credits and students desired workload.

Bachelor of Computer Science (Honours Applied Computing) for University Graduates

Admission Requirements:
(i) A 3-year General or a 4-year Honours Bachelor's degree from an accredited University.
(ii) Ontario Grade 12 "U" Advanced Functions and Introductory Calculus and Geometry and Discrete Mathematics or equivalent courses.

Total courses: 25

Major requirements: 22 courses consisting of 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-315, 60-321 or 60-340, 60-322, 60-330, 60-334, 60-367, 60-499 (6 credit course), 60-415, 60-422, 60-425, 60-426 or 60-420 and two other Computer Science major courses.

The major average will be calculated on the basis of grades obtained in 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-315, 60-321 or 60-340, 60-322, 60-330, 60-334, 60-367, 60-499 (6 credit course), 60-415, 60-422, 60-425, 60-426 or 60-420.

Other requirements: 62-120 (or 62-125), 62-130 (or 62-139 or 62-140), and 65-205.

POSSIBLE PROGRAM SEQUENCING (for recommended Summer entry)
Summer (Semester 1)
Intersession (6 week offering starting May): 60-140
Summer (6 week offering starting July): 60-141
12-week term (starting May): 60-100, 60-265 and 65-205

Fall (Semester 2)
12 week offering: 60-212
12 week offering: 60-254
12-week term: 60-256 and 60-266 and one of (62-120 or 62-125) or one of (62-130, 62-140 or 62-139)

Winter (Semester 3)
12-week: 60-315, 60-330, 60-340, 60-420, 60-499.

Summer (Semester 4)
12-week: 60-322, 60-334, 60-367, Computer Science elective, remaining Math course.

Fall (Semester 5)
12-week: 60-415, 60-422, 60-425, Computer Science elective, 60-499.

DEGREE COMPLETION PROGRAMS FOR COLLEGE OF APPLIED ARTS AND TECHNOLOGY (CAAT) GRADUATES

Bachelor of Computer Science (General) Degree Completion Program for Graduates for Qualifying Ontario and Other College Diploma Holders
[Most Ontario 3 year diploma graduates in a computer related program are eligible for admission under these degree completion agreements including: St. Clair, Algonquin, Cambrian, Centennial, Conestoga, Durham, Fanshawe, George Brown, Georgian, Humber, Mohawk, Niagara, Northern, St. Lawrence, Seneca, Sheridan, and Sir Sandford Fleming. Other colleges with similar programs may also be eligible and should inquire through the liaison office: liaison@uwindsor.ca.]

Admission Requirements:
1. Graduates of three-year Computer Science related Diploma program from a qualifying Ontario or other college of applied Arts and Technology (CAAT) with a grade-point average of at least 3.0 out of 4.0 (or cumulative average of at least a B (73%) grade), are eligible, within 10 years of graduation, for admission to Bachelor of Computer Science (General) degree program offered by the School of Computer Science at the University of Windsor under the provisions of this agreement.
2. Graduates of CAAT program, specified above, applying to the University of Windsor for the Bachelor of Computer Science (General) Degree Program more than 10 years after completing the Diploma Program, with a grade point average of at least 3.0 out of 4.0 (or a cumulative average of at least a B (73%)), will require the approval of the Director of the School of Computer Science.
3. In addition to the appropriate three-year Diploma and grade point average, applicants to the Bachelor of Computer Science (General) Degree Completion Program are required to have successfully completed Grade 12U Advanced Functions. The successful completion of Grade 12U Calculus and Vectors is strongly recommended.
4. Students admitted to the Bachelor of Computer Science (General) Degree Completion Program will obtain the equivalent of 1.5 years of Advanced Standing (or awarded 15 course transfers). Additional credit for courses taken toward the CAAT Diploma will not be permitted.
5. Students are required to complete fifteen (15) courses at the University of Windsor in fulfillment of the requirements of the Bachelor of Computer Science (General) Degree Completion Program.
6. The Bachelor of Computer Science (General) Degree Completion Program will be reviewed and amended, if appropriate, by the School of Computer Science every three years following the approval of the program.

Bachelor of Computer Science (General)
Total courses: 15

Major requirements: eleven courses, consisting of 60-100, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-322, 60-315, 60-330, 60-334.*
**Excluding courses 60-104, 60-140, 60-205, 60-270, 60-275, 60-305, 60-367.*

The major average will be calculated on the basis of the grades obtained in 60-

100, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-322, 60-315, 60-330, 60-334.

Other requirements: (four courses including)
(a) 62-120 (or 62-125) , 62-130 (or 62-140 or 62-139), and 65-205;
(b) one course from Arts/Languages;

No more than 7 courses can be at the 100 level.

Possible Course Sequence
Semester 1: 60-100, 60-141, 60-265, 62-120, one course from Arts/Languages.
Semester 2: 60-212, 60-254, 60-256, 60-266, 62-130.
Semester 3: 60-322, 60-315, 60-330, 60-334, 65-205.

Bachelor of Computer Science (Honours Applied Computing) (with and without Co-op) Degree Completion Program for BCS (Honours Applied Computing) (for both Coop and Non Coop options) for Qualifying Ontario and Other College Diploma Holders
[Most Ontario 3 year diploma graduates in a computer related program are eligible for admission under these degree completion agreements including: St. Clair, Algonquin, Cambrian, Centennial, Conestoga, Durham, Fanshawe, George Brown, Georgian, Humber, Mohawk, Niagara, Northern, St. Lawrence, Seneca, Sheridan, and Sir Sandford Fleming. Other colleges with similar programs may also be eligible and should inquire through the liaison office: liaison@uwindsor.ca.]

Admission Requirements:
1. Graduates of three-year Computer Science related Diploma program from a qualifying Ontario or other college of applied Arts and Technology (CAAT) with a grade-point average of at least 3.0 out of 4.0 (or a cumulative average of at least a B (73%) grade), are eligible, within 10 years of graduation, for admission to Bachelor of Computer Science (Honours Applied Computing) degree program offered by the School of Computer Science at the University of Windsor under the provisions of this agreement. Degree Completion Program for BCS (Honours Applied Computing) for both Coop and Non Coop options) for Qualifying Ontario and Other College Diploma Holders.
2. Graduates of CAAT program, specified above, applying to the University of Windsor for the Bachelor of Computer Science (Honours Applied Computing) Degree Program more than 10 years after completing the Diploma Program, with a grade point average of at least 3.0 out of 4.0 (or a cumulative average of at least a B (73%)), will require the approval of the Director of the School of Computer Science.
3. In addition to the appropriate three-year Diploma and grade point average, applicants to the Bachelor of Computer Science (Honours Applied Computing) Degree Completion Program are required to have successfully completed Grade 12U Advanced Functions. The successful completion of Grade 12U Calculus and Vectors is strongly recommended.
4. Students admitted to the Bachelor of Computer Science (Honours Applied Computing) Degree Completion Program will obtain the equivalent of 1.5 years of Advanced Standing (or awarded 15 course transfers). Additional credit for courses taken toward the CAAT Diploma will not be permitted.
5. Students are required to complete twenty five (25) courses at the University of Windsor in fulfillment of the requirements of the Bachelor of Computer Science (Honours Applied Computing) Degree Completion Program.
6. The Bachelor of Computer Science (Honours Applied Computing) Degree Completion Program will be reviewed and amended, if appropriate, by the School of Computer Science every three years following the approval of the program.

Bachelor of Computer Science (Honours Applied Computing) (with and without co-op)
Total courses: 25 courses

Major requirements: eighteen courses consisting of 60-100, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-315, 60-321 or 60-340, 60-322, 60-330, 60-334, 60-499 (6 credit course), 60-415, 60-422, 60-425, 60-426 or 60-420 and 60-499.*
**Excluding courses 60-104, 60-140, 60-205, 60-270, 60-275, 60-305, 60-367.*

The major average will be calculated on the basis of grades obtained in 60-100, 60-141, 60-212, 60-254, 60-256, 60-265, 60-266, 60-315, 60-321 or 60-340, 60-322, 60-330, 60-334, 60-415, 60-422, 60-425, 60-426 or 60-420, and 60-499.

*Other requirements: (*seven courses including)
(a) 62-120 (or 62-125), 62-130 (or 62-139 or 62-140), and 65-205
(b)One course from Arts/Languages

(c)Three other courses from any area of study, including Computer Science*

**Excluding courses 60-104, 60-140, 60-205, 60-270, 60-275, 60-305, 60-367.*
No more than 7 courses can be at the 100 level.

Possible Course Sequence
Semester 1: 60-100, 60-141, 60-265, 62-120, one course from Arts/Languages.
Semester 2: 60-212, 60-254, 60-256, 60-266, 62-130.
Semester 3: 60-322, 60-315, 60-330, 60-334, 65-205.
Semester 4: 60-340, 60-415, 60-420, 60-422, 60-499 (part 1).
Semester 5: Three electives from any area, 60-425, 60-499 (part 2).

For co-op stream, in addition:
The successful completion of at least three co-op work terms.

Articulation Agreements for holders of four year CIC Cairo BTech Degree:

Bachelor of Computer Science (General)

*Total courses:*30 courses consisting of 13 University of Windsor courses that must be completed and 17 University of Windsor courses that can be awarded transfer credits for CIC BTEC courses taken.
Major University of Windsor Course Requirements to Complete seven courses consisting of 60-100, 60-212, 60-254, 60-256, 60-266, 60-322, 60-330.
The major average will be calculated on the basis of grades obtained in courses including 60-100, 60-212, 60-254, 60-256, 60-266, 60-322, 60-330.

Other University of Windsor Requirements to Complete:
(six courses including)
(a) 62-120 (or 62-125), 62-130 (or 62-139 or 62-140), and 65-205,
(b) One course from Social Sciences at the 200 to 400 level.
(c) Two courses from any area of study including Computer Science in 200 to 400 level.

The University of Windsor Requirements that May Be Awarded Transfer Credits:
(Seventeen consisting of)
i) Major Requirements (seven courses consisting of): 60-140, 60-141, 60-265, 60-315, 60-367, 60-393, 60-311.
ii) Other Requirements (b): One Arts/Language elective
iii) Other Requirement (c): Nine other courses consisting of 3 Computer Science courses (60-205, 60-275, 60-305), and 6 Business Courses (75-290, 70-151, 70-255, 71-2xx, 73-101, 74-002).

Bachelor of Computer Science (Honours Applied Computing)
(This articulation agreement is for holders of a four year CIC Cairo BTEC Degree)

Total courses: 40 courses consisting of 18 University of Windsor courses that must be completed and 22 University of Windsor courses that can be awarded transfer credits for CIC BTEC courses taken.

Major University of Windsor Course Requirements to Complete:
fourteen courses consisting of: 60-100, 60-212, 60-254, 60-256, 60-266, 60-321 or 60-340, 60-322, 60-330, 60-334, 60-415, 60-422, 60-425, 60-499 (6 credit course).

The major average will be calculated on the basis of grades obtained in 60-100, 60-212, 60-254, 60-256, 60-266, 60-321 or 60-340, 60-322, 60-330, 60-334, 60-415, 60-422, 60-425, 60-499 (6 credit course).

Other University of Windsor Requirements to Complete:
(four courses including)
(a) 62-120 (or 62-125), 62-130 (or 62-139 or 62-140), and 65-205,
(b) One course from Social Sciences.

The University of Windsor Requirements that May Be Awarded Transfer Credits:
(Twenty Two consisting of)
i) Major Requirements (eight courses consisting of): 60-140, 60-141, 60-265, 60-315, 60-367, 60-426, 60-311, 60-393.
ii) Other Requirements (b): One Arts/Language elective
iii) Other Requirement (c): Thirteen other courses consisting of 6 Computer Science courses (60-104, 60-205, 60-275, 60-2xx, 60-305, 60-470), and 7 Business Courses (75-1xx, 75-290, 70-151, 70-255, 71-2xx, 73-101, 74-002).

BCS (General) for Qualifying Ontario CAAT (or equivalent) Students with 2 Years of Study at CAAT (or equivalent) diploma program

Admission Requirements:
Students who have successfully completed two years of a qualifying Ontario College of Applied Arts and Technology diploma program (or equivalent) with a cumulative average of 70% (B-) or higher may receive up to 8 courses of transfer credit toward a Bachelor of Computer Science (General) degree, provided they are within 10 years of the completion of the CAAT (or equivalent) courses, have successfully completed Grade 12U Advanced Functions, and have completed a full 2 years of study at a CAAT (or equivalent) including all recommended sequence of 20 courses as confirmed through audit or CAAT (or equivalent) diploma. Students who completed their courses more than 10 years ago may be admitted through this articulation agreement, following consultation and approval by the Director of the School of Computer Science. Students who have not successfully completed Grade 12U Advanced Functions will be required to take 03-62-102 (Access to Algebra) or its equivalent. The 8 University of Windsor courses students may receive transfer credits for consist of: (i) 2 major requirements 03-60-367 (Computer Networks) and One other Computer Science major elective; (ii) 6 other requirements from any area: 03-60-104 (Computer Concepts for End-Users), 03-60-305 (Cyber-Ethics), 4 Science electives (03-xx-xxx). Contact the department for the course equivalency table used to determine transfer credit.

Total courses: 22 or more to be completed (subject to the number of transfer credits awarded)

Major requirements: 13 courses – courses to be determined based on the transfer credit awarded

Other requirements: 9 courses – courses to be determined based on the transfer credit awarded

BCS (Honours Applied Computing) (Co-op) for Qualifying Ontario CAAT (or equivalent) Students with 2 Years of Study at CAAT (or equivalent) diploma program

Admission Requirements:
Students who have successfully completed two years of a qualifying Ontario College of Applied Arts and Technology diploma program (or equivalent) with a cumulative average of 70% (B-) or higher may receive up to 8 courses of transfer credit toward a Bachelor of Computer Science (Honours Applied Computing) (with or without Co-op) degree, provided they are within 10 years of the completion of the CAAT (or equivalent) courses, have successfully completed Grade 12U Advanced Functions, and have completed a full 2 years of study at a CAAT (or equivalent) including all recommended sequence of 20 courses as confirmed through audit or college diploma. Students who completed their courses more than 10 years ago may be admitted through this articulation agreement, following consultation and approval by the Director of the School of Computer Science. Students who have not successfully completed Grade 12U Advanced Functions will be required to take 03-62-102 (Access to Algebra) or its equivalent. The 8 University of Windsor courses students may receive transfer credits for consist of: (i) 2 major requirements 03-60-367 (Computer Networks) and One other Computer Science major elective; (ii) 6 other requirements from any area: 03-60-104 (Computer Concepts for End-Users), 03-60-305 (Cyber-Ethics), 4 Science electives (03-xx-xxx). Contact the department for the course equivalency table used to determine transfer credit.

Total courses: 32 to be completed (subject to the number of transfer credits awarded)

Major requirements: 20 courses – courses to be determined based on the transfer credit awarded

Other requirements: 12 courses – courses to be determined based on the transfer credit awarded

COMPUTER SCIENCE: COURSES

Fall 2015 Undergraduate Calendar

Foreword/Glossary

Search the Undergraduate Calendar

Programs, Certificates, Minors, and Courses

University/College Agreements

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Examinations, Grading, and Graduation

CALENDARS (Undergraduate & Graduate)

Responsibility/Disclosure Notifications

Main University Secretariat

SOCIAL WORK

PROGRAMS

SOCIAL WORK
Honours Bachelor of Social Work
Honours Bachelor of Social Work and Diaspora Studies (Combined Honours) *(Note: As of Fall 2014, there are no new admissions to this program.)(Discontinued as of August 31, 2016)*
Honours Bachelor of Social Work and Disability Studies (Combined Honours)
Honours Bachelor of Social Work and Women's Studies (Combined Honours)
Combined Honours in Diaspora Studies *(Note: As of Fall 2014, there are no new admissions to this program.)(Discontinued as of August 31, 2016)*
Minor in Diaspora Studies

SOCIAL WORK DEGREE COMPLETION PROGRAMS
Honours Bachelor of Social Work for University Graduates
Honours Bachelor of Social Work for Ontario College Child and Youth Care Program (formerly Child and Youth Worker) Graduates

DISABILITY STUDIES *(joint programs with Psychology)*
BA Honours in Disability Studies
Combined Honours BA in Disability Studies and Psychology
Minor in Disability Studies

DISABILITY STUDIES DEGREE COMPLETION PROGRAMS
BA Honours Bachelor of Arts in Disability Studies for Ontario College Child and Youth Care (formerly Child and Youth Worker) - Degree Completion Program
Honours Bachelor of Arts in Disability Studies for College of Applied Arts and Technology Graduates - Degree Completion Program

Additional Information: Social Work Program Regulations and admission requirements
GENERAL UNDERGRADUATE REGULATIONS

Honours Bachelor of Social Work

Total courses: 40

Major requirements: 47-117, 47-118, 47-204, 47-210, 47-336, 47-337, 47-338, 47-339, 47-344, 47-371, 47-416, 47-423, 47-430, 47-431, 47-473 (6 credit hours), 47-475 (12 credit hours).

Other requirements:
(a) 01-150, 01-151;
(b) 02-250;
(c) Two courses from Science;
(d) A minimum of six courses from one of the disciplines or programs of study listed below: Communication Studies, Media, and Film, Labour Studies, Psychology, Sociology, Anthropology, History, Women's Studies, Political Science, Family and Social Relations, Diaspora Studies, and Disability Studies.
(e) 9 courses from any area of study including Social Work electives.

Phasing out of previous curriculum: Program advisors will determine appropriate exceptions for students who are completing their program under the previous curriculum and who fall out of sequence.

Program Sequencing
Year 1: 01-150, 01-151, 47-117, 47-118, two science courses, two introductory courses from a social science discipline and two introductory courses from any area of study.
Year 2: 02-250, 47-204, 47-210, and four course options at the 200-400 level from a social science discipline, plus three courses from any area of study.
Year 3: 47-336, 47-337, 47-338, 47-339, 47-344, 47-371, plus four option courses from any area of study including social work electives.

Year 4: 47-416, 47-423, 47-430, 47-431, 47-473, 47-475.

Honours Bachelor of Social Work and Diaspora Studies

Total courses: 40

Major requirements:

Social Work - Major requirements: 47-117, 47-118, 47-204, 47-336, 47-337, 47-338, 47-339, 47-344, 47-371, 47-416, 47-423, 47-430, 47-431, 47-473 (6.0 credit hours), 47-475 (12 credit hours).

*Every effort will be made to ensure that Field Education I and II will allow the Combined Social Work and Diaspora Studies student to utilize their knowledge from both areas of study in the experiential learning process.

Diaspora Studies - Major Requirements:
(a) All of the following core courses (5 courses): 07-236, 40-262, 45-170, 47-210, 49-112;
(b) Four of the following courses on a diaspora identity formation: 07/15-235, 26-354, 34-255, 46-236, 46-342, 46-445, 48-333, 45-354, 45-355, 45-356, 45-465;
(c) Four courses on diasporas in the Canadian context, from the following: 26-361, 26-371, 40-245, 40-462, 43-361, 43-362, 45-399, 45-370, 48--240, 43-246, 43-247, 26-201, 43-220, 43-321, 43-320, 63-241;

Other requirements: Eight courses:
(a) 01-150, 01-151;
(b) Two science electives;
(c) 02-250;
(d) Three courses from any area of study, excluding Social Work and Diaspora Studies

Phasing out of previous curriculum: Program advisors will determine appropriate exceptions for students who are completing their program under the previous curriculum and who fall out of sequence.

Program Sequencing
Year 1: 01-150, 01-151, 45-170, 47-117, 47-118, 49-112, one science elective and three electives from any area of study.
Year 2: 02-250, 07-236*, 40-262, 47-204, 47-210, one science elective, 4 Diaspora electives.
Year 3: 47-336, 47-337, 47-338, 47-339, 47-344, 47-371, 4 Diaspora electives.
Year 4: 47-416, 47-423, 47-430 , 47-431, 47-473 (6.0 credit hours), 47-475 (12 credit hours).

Honours Bachelor of Social Work and Disability Studies

Total courses: 40

Major requirements: Social Work 19 courses

47-117, 47-118, 47-204, 47-336, 47-337, 47-338, 47-339, 47-344, 47-371, 47-416 , 47-423, 47-430, 47-473 (6.0 credit hours), 47-431, 47-475 (12 credit hours).
* Every effort will be made to ensure that Field Education I and II will allow the Combined Social Work and Disability Studies student to utilize their knowledge from both areas of study in the experiential learning process.

Major requirements: Disability Studies 13 courses
(a) four discipline foundation courses: 46-115, 46-116, 38-101, 47-210;
(b) three *Disability Studies-Emphasis courses;*
(c) three human development courses: 46-223, 46-224, 46-225
(d) three Disability Studies courses: 37-301, 37-302, 37-401.

Other requirements: Eight courses:
(a) 01-150, 01-151;
(b) two Science electives;
(c) 02-250;
(d) three courses from any area of study, excluding social work and disability studies.

Recommended Course Sequencing:
Year 1: 01-150, 01-151, 47-117, 47-118, 46-115, 46-116, 38-101, one science elective and two courses from any area of study.
Year 2: 47-210, 47-204, 02-250, 46-223, 46-224, one science elective, 3 Disability

Studies Emphasis courses and one course from any area of study.
Year 3: 47-336, 47-337, 47-338, 47-339, 47-344, 47-371, 46-225, 37-301, 37-302, 37-401.
Year 4:, 47-416, 47-423, 47-430, 47-473 (6.0 credit hours), 47-431, 47-475 (12 credit hours),

Honours Bachelor of Social Work and Women's Studies

Total courses: 40

Social Work - Major requirements: 47-117, 47-118, 47-204, 47-336, 47-337, 47-338, 47-339, 47-344, 47-371, 47-416, 47-423, 47-430, 47-431, 47-473 (6 credit hours), and 47-475 (12 credit hours).

Women's Studies - Major requirements: fourteen courses, including
(a) 53-100, 53-202, 53-220, 53-301;
(b) 53-200 or 43-251;
(c) 53-201 or 48-251;
(d) one of 53-300, 34-359, 53-305;
(e) at least two of 53-211, 45-211, 53-260, 53-310, 53-320, 48-353, 53-340, or 53-390;
(f) 47/53-355 Feminist Social Work Practice; one of 47/53-347 Social Work and Violence OR 47/53-3xx Social Work, Gender and Sexuality
(g) three additional Women's Studies courses.

Other Requirements:
(a) 01-150, 01-151;
(b) 02-250;
(c) One science elective;
(d) Three courses from any area of study, excluding Social Work and Women's Studies. (It is recommended that these electives be from related disciplines)

Program Sequencing
Year 1: (Ten courses) 01-150, 01-151, 47-117, 47-118, 53-100, 53-201 (or 48-251), 53-XXX (1 Women's Studies elective), 1 science elective, and 2 courses from any area of study, excluding Social Work and Women's Studies.
Year 2: (Ten Courses) 02-250, 47-204, 53-200 (or 43-251), 53-202, at least one of 53-211 (or 45-211) or 53-260 or 53-310, 53-220, 3 Women's Studies electives, plus one elective from any area of study.
Year 3: (Ten courses) 47-336, 47-337, 47-338, 47-339, 47-344, 47-371, 53-300 (or 34-359 or 53-305), 53-301, 47/53-355 Feminist Social Work Practice; plus one of 47/53-347 OR 47/53-3xx Social Work, Gender and Sexuality.
Year 4: 47-416, 47-423, 47-430 (Integration Seminar I), 47-431 (Integration Seminar II), 47-473 (Field Education I, 6 credit hours), 47-475 (Field Education II, 12 credit hours).

Combined Honours in Diaspora Studies

Total courses: forty

Major requirements-Diaspora Studies: 14 courses as follows
(a) 45-170, 07-236, 40-262, 47-210, 49-112;
(b) three of 26-354, 34-255, 46-236, 46-342, 46-445, 48--333;
(c) two of 26-361, 40-245, 40-462, 48--240;
(d) two of 26-371, 43-361, 43-362, 45-370;
(e) one of 40-234, 45-275, 48-290; 48-390
(f) One Diaspora practicum (to be designed/designated).

Major requirements–Other area of study: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) additional courses from any area of study to a total of forty courses.

Minor in Diaspora Studies

Requirements: Six courses: 07-236, 45-170, 49-112 and three of the following: 26-354, 26-361, 26-371, 34-255, 40-245, 40-462, 43-361, 43-362, 45-370, 46-236,

46-342, 46-445, 47-210, 48-240, 48-333.

Honours Bachelor of Social Work for University Graduates

Total courses: 20

Major requirements: 47-204, 47-210, 47-336, 47-337, 47-338, 47-339, 47-344, 47-371 , 47-416, 47-423, 47-430, 47-431, 47-473 (6 credit hours), 47-475 (12 credit hours).

Other requirements:
(a) 02-250 or equivalent;
(b) One course from any area of study

Recommended options (if any):
Students who have previously taken 02-250 or equivalent may substitute a social science course at the 200-400 level or a 300-400 level social work elective.

Phasing out of previous curriculum: Program advisors will determine appropriate exceptions for students who are completing their program under the previous curriculum and who fall out of sequence.

Program Sequencing
Year 1: 02-250, 47-204, 47-210, 47-336, 47-337, 47-338, 47-339, 47-344, 47-371, one course from any area of study.

Year 2: 47-416, 47-423, 47-430, 47-431, 47-473 (6.0 credit hours), 47-475 (12 credit hours).

Honours Bachelor of Social Work for Ontario Child and Youth Care Program Graduates

Total courses: 20, plus a minimum of an Ontario College of Applied Arts and Technology Child and Youth Care diploma with the following stipulation: In cases where a student previously completed a university course or courses, the course(s) will not be used to fulfill the 20 course degree requirements if they were used by the College of Applied Arts and Technology to grant advanced standing in the diploma or certificate program. In such cases, the Social Work Undergraduate Program Coordinator (or designate) will identify a substitute course requirement.

Students are strongly advised to consult with a Social Work academic advisor before registering for courses in this program.

Major requirements: 47-204, 47-210, 47-336, 47-337, 47-338, 47-339, 47-344, 47-371 , 47-416, 47-423, 47-430, 47-431, 47-473 (6 credit hours), 47-475 (12 credit hours).

Other requirements:
(a) 02-250 or equivalent;
(b) One course from any area of study

Recommended options (if any):
Students who have previously taken 02-250 or equivalent may substitute a social science course at the 200-400 level or a 300-400 level social work elective.

Phasing out of previous curriculum: Program advisors will determine appropriate exceptions for students who are completing their program under the previous curriculum and who fall out of sequence.

Program Sequencing
Year 1: 02-250, 47-204, 47-210, 47-336, 47-337, 47-338, 47-339, 47-344, 47-371, one course from any area of study.
Year 2: 47-416, 47-423, 47-430, 47-431, 47-473 (6 credit hours), 47-475 (12 credit hours).

BA Honours in Disability Studies

Total courses: 40 courses

Major requirements: 20 courses, including:
(a) six discipline foundation courses: 46-115, 46-116, 47-117, 47-118, 38-101, 47-210;
(b) four Disability Studies-Emphasis courses

(c) one social science research methods course: 46-230;
(d) three human development courses: 46-223, 46-224, 46-225;
(e) six Disability Studies courses: 37-301, 37-302, 37-401,37-402, 37-465 (6.00 credit course);

Option requirements: 6 courses, including:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two additional courses from Arts, Languages, Social Sciences or Science.

Other requirements: 14 courses, including:
(a) 01-150, 01-151;
(b) 02-250;
(c) 11 courses from any area of study.

RECOMMENDED COURSE SEQUENCE
Year 1: 46-115, 46-116, 47-117, 47-118, 38-101, 01-150, 01-151, one Arts course, one Languages or Science course; one Arts, Languages, Social Sciences or Science course;
Year 2: 47-210, 46-230, 46-223, 46-224, 02-250, one Arts course, one Languages or Science course, one Arts, Languages, Social Sciences or Science course; two courses from any area of study;
Year 3: 37-301, 37-302, two *Disability Studies-Emphasis courses*, 46-225, five courses from any area of study;
Year 4: 37-401, 37-402, 37-465 (6.00-credit course), two *Disability Studies-Emphasis courses*; four courses from any area of study.

Combined Honours BA in Disability Studies and Psychology

Total courses: forty.

Major requirements- Disability Studies:14 courses, including:
(a) four discipline foundation courses: 47-117, 47-118, 38-101, 47-210;
(b) four Disability Studies-Emphasis courses;
(c) six Disability Studies courses: 37-301, 37-302, 37-401,37-402, 37-465 (6.00 credit course);

Major requirements - Psychology: fourteen courses, including 46-115, 46-116, 46-223, 46-224, 46-225, 46-230, and 46-320 and one of 46-335, 46-353 or 46-358. The total number of Psychology courses must include at least four 300-level courses and two 400-level courses.

Option requirements: 6 courses, including:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements: 6 courses, including:
(a) 01-150, 01-151;
(b) 02-250;
(c) three courses from any area of study.

RECOMMENDED COURSE SEQUENCE
Year 1: 46-115, 46-116, 47-117, 47-118, 38-101, 01-150, 01-151,one Arts course, one Languages or Science course; one course from any area of study;
Year 2: 47-210, 46-230, 46-223, 46-224, 02-250, one Languages or Science course, one Disability Studies Emphasis course; one course from any area of study, one Arts course, one course from Arts, Languages, Social Sciences or Science;
Year 3: 37-301, 37-302, 46-225, 46-320, one of 46-335, 46-353 or 46-358, one Disability Studies-Emphasis course, two open psychology courses, one course from any area of study, one course from Arts, Languages, Social Sciences or Science;
Year 4: 37-401, 37-402, 37-465 (6.00-credit course), two Disability Studies-Emphasis courses; four open psychology courses.

Minor In Disability Studies

Requirements: six Disability Studies courses including 38-101, 37-301, 37-302, plus three Disability Studies Emphasis courses at the 200 level or above.

BA Honours Bachelor of Arts in Disability Studies for Ontario College Child and Youth Care Program Graduates - Degree Completion Program

Total courses: 20 courses, plus a minimum of an Ontario College of Applied Arts and Technology Child and Youth Care diploma with the following stipulation:
In cases where a student previously completed a university course or courses, the course(s) will not be used to fulfill the 20 course degree requirements if they were used by the College of Applied Arts and Technology to grant advanced standing in the diploma or certificate program. In such cases, the Disability Studies Program Coordinator (or designate) will identify substitute course requirement(s).

Students are strongly advised to enroll in this program in the Summer semester so they can complete at least two of the required Year 1 courses before the Fall semester.

Students are strongly advised to consult with a Disability Studies academic advisor before registering for courses.

Major requirements: 15 courses, including;
(a) four discipline foundation courses: 46-115, 47-117, 47-118, 38-101;
(b) one social science research methods course: 46-230;
(c) two human development courses: 46-224, 46-225;
(d) six Disability Studies courses: 37-301, 37-302, 37-401, 37-402, 37-465 (6 credit course);
(e) one Disability Studies or Disability Studies-Emphasis course (200 level or higher) and one Disability Studies or Disability Studies-Emphasis course (any level).

Option requirements: 2 courses, including:
(a) two Arts, Languages or Science courses, excluding Disability Studies or Disability Studies-Emphasis courses.

Other requirements: 3 courses, including:
(a) 02-250;
(b) two courses from any area of study, including Psychology (excluding 46-116 and 46-223), Social Work, or Disability Studies.

RECOMMENDED COURSE SEQUENCE
Year 1, Fall Semester: 46-115, 47-117, 38-101, 37-301, 02-250;
Year 1, Winter Semester: 47-118, 46-224, 46-230, 37-302, and one Option or Other requirement course;
Year 2, Fall Semester: 46-224, 37-401, and three Option or Other requirements courses;
Year 2, Winter Semester: 46-225, 37-402, 37-465 (6 credit course) and one Option or Other requirement course.

Honours Bachelor of Arts in Disability Studies for College of Applied Arts and Technology Graduates - Degree Completion Program

Total courses: 30 courses, plus a College of Applied Arts and Technology diploma in a Child and Youth Care (formerly Child and Youth Worker), Developmental Services Worker, Early Childhood Education, Educational Support and Social Service Worker program. Graduates of related Education, Community and Social Services programs may be admitted with Disability Studies Program Coordinator (or their designate) approval with the following stipulations:
- No more than nine courses can be at the 100 level.
- In cases where a student previously completed a university course or courses, the course(s) will not be used to fulfill the 30 course degree requirements if they were used by the College of Applied Arts and Technology to grant advanced standing in the diploma or certificate program. In such cases, the Disability Studies Program Coordinator (or their designate) will identify a substitute course requirement.

Major requirements: 20 courses, including:
(a) five discipline foundation courses: 46-115, 46-116, 47-117, 47-118, 38-101;
(b) one human diversity course: 47-210;
(c) one social science research methods course: 46-230;
(d) three human development courses: 46-223, 46-224, and 46-225;
(e) six Disability Studies courses: 37-301, 37-302 , 37-401, 37-402, 37-465 (6 credit course);
(f) four Disability Studies or Disability Studies-Emphasis courses.

Option requirements: 4 courses, including:
(a) two courses from Arts;
(b) two courses from Languages or Science;

Other requirements: 6 courses, including:
(a) 02-250;
(b) five courses from any area of study.

RECOMMENDED COURSE SEQUENCE
Year 1: 46-115, 46-116, 47-117, 47-118, 38-101, 47-210, 02-250, one course from Arts, one course from Languages or Science; one course from any area of study;
Year 2: 46-223, 46-224, 46-225, 46-230, 37-301, 37-302, two Disability Studies or Disability Studies-Emphasis courses, two courses from any area of study;
N.B.: Students who did not complete 02-250, 38-101, 47-210, and 46-230 prior to acceptance into the Disability Studies program are strongly encouraged to complete these courses by the end of the first semester of their Second Year.
Year 3: 37-401, 37-402, 37-465 (6 credit course), two Disability Studies or Disability Studies-Emphasis courses, one course from Arts, one course from Languages or Science, two courses from any area of study.

DISABILITY- STUDIES: COURSES
DISABILITY- STUDIES: DISABILITY-STUDIES EMPHASIS COURSES

SOCIAL WORK: COURSES

PSYCHOLOGY: PROGRAMS
PSYCHOLOGY: COURSES

Fall 2015 Undergraduate Calendar

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LABOUR STUDIES

PROGRAMS
General Labour Studies *(Note: As of Fall 2014, there are no new admissions to this program.)*
Honours Labour Studies *(Note: As of Fall 2013, there are no new admissions to this program.)* *(Discontinued as of August 31, 2016)*
Combined Honours Labour Studies *(Note: As of Fall 2013 there are no new admissions to this program.)*
Minor in Labour Studies
Certificate in Work and Employment Issues (General stream or CHRP Designation stream)

DEGREE COMPLETION PROGRAMS
Honours Labour Studies program for Graduates from College of Arts and Technology who have completed a Business Administration diploma *(Note: As of Fall 2013, there are no new admissions to this program)* *(Discontinued as of August 31, 2016)*
Honours Labour Studies (with Human Resources Certificate from a College of Arts and Technology) *(Note: As of Fall 2013, there are no new admissions to this program)* *(Discontinued as of August 31, 2016)*

General Labour Studies program for Graduates from College of Arts and Technology who have completed a Business Administration diploma *(Note: As of Fall 2014, there are no new admissions to this program.)* *(Discontinued as of August 31, 2016)*
General Labour Studies (with Human Resources Certificate from a College of Arts and Technology) *(Note: As of Fall 2014, there are no new admissions to this program.)* *(Discontinued as of August 31, 2016)*

Additional Information: GENERAL UNDERGRADUATE REGULATIONS

General Labour Studies

Total courses: thirty.

Major Requirements: fifteen courses, including
(a)54-100; 54-105; 54-200; 54-204; 54/53-206 or 54/48-225 or 54/34-237; 54-301; 54-218, 54/48-327 or 54/46-370; 54-349;
(b)one of 40-234, 45-275, 48-290, 48-390;
(c) Five of (if not taken under (a)): 54/53-206, 54/48-225; 54/34-237, 54/40-322, 54/48-327, 54/48-332, 54/46-370, 54-401, 02-300, 40-225 (or 40-325 or 40-425), 48-228, 48-321, 53-100 (or 53-200/43-251), 71-344, 71-446 (or 71-448 or 71-449 or 71-481).

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) five social science courses with at least two at the 200 level or above
(c) two courses from any area of study.

CALCULATION OF AVERAGE
The major average shall be calculated on the basis of grades obtained in the courses listed in Major Requirements (a), (b), and (c) above.

RECOMMENDED COURSE SEQUENCE

First Year
54-100, (54-105), 53-100, two 100-level Social Sciences courses (see Other requirements above), 01-150, 01-151, and three other 100-level courses (see Option/Other requirements above).

Second Year
54-200, 54-204, 54/53-206 or 54/48-225 or 54/34-237, one of 40-234, 45-275, 48-290, 48-390, plus one or two 200-level courses from Major Requirements (c) and additional courses (see Option/Other requirements above) to a total of ten.

Third Year
54-301, 54-218, 54/48-327 or 54-46-370, 54/43-349 and remaining courses from Major Requirements (c) and additional courses to a total of ten.

Honours Labour Studies
(Note: As of Fall 2013, there are no new admissions to this program.)

Total Courses: Forty

Major Requirements:
a) Sixteen courses: 54-100, 54-105, 54-200, 54-204, 48-228, 54/48-225, 54/34-237 or 54/53-206, 48-332, 54-301, 54-218, 54/43-349~~,~~ 71-344; two of 02-300, 54/48-327, 54/40-322, 54/46-370, or 54-401; one of 48-408, 45-421, 45-464, 43-445, 43-446 or 53-410; and one of 48-101, 48-102, 49-111 or 49-112.
b) one of 40-234; 45-275; 48-290; 48-390;
c) three of (if not taken under a)): 53/54-206, 54/34-237, 54/40-322, 54/48-327, 54/46-370, 54-401, 34-323 (or 45-355 or 48-227 or 48-375), 40-225 (or 40-325 or 40-425), 41-350, 41-353, 45-212, 45-356, 47-117 (or 47-204), 48-321, 48-367, 53-100 (or 53-200 or 43-251), 71-448 (or 71-481).

Other requirements:
d) 02-250
e) Two writing courses - 01-150 and 01-151
f) Two courses from Arts
g) Two courses from Languages or Sciences
h) Two courses from any area of study excluding Social Science
i) Four courses from any area
j) Seven Social Science courses, with at least four courses at the 300-level or above

Combined Honours Labour Studies
(Note: As of Fall 2013, there are no new admissions to this program.)

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements - Labour Studies: Thirteen courses, including:
(a) 54-100, 54-105; 54-200; 54-204; 54/48-225 or 54/53-206; 54-301; 54-218; 54/48-327 or 54/46-370; 54/43-349; one of 54-401, 43-446, 43-445, 45-464, 45-421, 48-408, or 53-410~~)~~.
(b) three of (if not taken under (a)): 54/53-206, 54/48-225, 54/34-237, 54/40-322, 54/48-327, 54/48-332, 54/46-370, 54-401, 02-300, 40-225 (or 40-325 or 40-425), 48-228, 48-321, 53-100, 71-344, 71-446 (or 71-448 or 71-449 or 71-481).

Major requirements - Other Subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) additional courses from any area of study to a total of forty courses.

Minor in Labour Studies

Required: 54-100, 54-105, plus four other Labour Studies (54-***) courses.

Certificate in Work and Employment Issues

Total courses: ten

Requirements for General Stream:
(a) one of: 54-100, 54-105, or 02-02-100;
(b) nine of: 54-200, 54-204, 54/53-206, 54/48-225, 54/34-237, 54/53-260, 54-240/40-270/24-270, 54-218, 54/40-322, 54/48-326, 54/48-327, 54/48-332, 54/43-349, 54/46-370, 54-350, 71-344.

Requirements for CHRP Designation stream (from Colleges of Applied Arts & Technology):
(a) one of: 54-105 or 02-02-100;
(b) four of 54-200, 54-204, 54/53-206, 54/48-225, 54/34-237, 54/53-260, 54-2xx*, 54-218, 54/40-322, 54/48-326, 54/48-327, 54/48-332, 54/43-349, 54/46-370, 54-350, 71-344.
(c) CHRP Designation from any CAAT (minimum of 10 CAAT courses equivalent to 5 UWindsor transfer courses).

General Labour Studies with 3 Year CAAT Business Administration Diploma with minimum B- Cumulative Average:

Total Courses: 15 courses

Major Requirements
a) Thirteen Labour Studies courses: 54-100, 54-105, 54-200, 54-204, 54/53-206, 54/48-225 or 54/34-237, 54-301, 54-218, 54/40-322 or 54/48-327, 54/48-332, 54/43-349, 54/46-370, 54-401 .

Other Requirement
b) 01-150 and 01-151**

**Where the applicant has completed courses equivalent to 01-150 and 01-151, two other courses from any area of study will be substituted by the applicant.

Honours Degree in Labour Studies with 3 Year CAAT Business Administration Diploma with minimum B- Cumulative Average:
(Note: As of Fall 2013, there are no new admissions to this program.)

*Total Courses:*25 Courses (with no more than 7 at the 100-level)

Major requirements:
a) Fifteen Labour Studies courses: 54-100, 54-105, 54-200, 54-204, 54/48-225, 48-228, 54-301, 54-218, 45-248 or 54/40-322, 54/43-349, 54/46-370, 54/53-206, 54-401; two of 02-300, 54/34-237, 54/48-327, 54/48-332.

Other requirements:
a) 01-150 and 01-151**
b) 02-250
c) one of 40-234, 45-275, 48-290, or 48-390.
d) Six courses from any area of study, with at least one at the 200-level or above.

**Where the applicant has completed courses equivalent to 01-150 and 01-151, two other courses from any area of study will be substituted by the applicant.

General Labour Studies with Human Resources Certificate from Colleges of Arts and Technology Degree Completion Program

Admission Requirements
The ten listed St. Clair courses will count as five university courses towards the Honours degree. Students will be admitted to the program by applying to the University of Windsor. The normal FASS/ Labour Studies admission requirements apply.

Total Courses: 25 courses plus the 10 required CAAT Courses* (with no more than 7 at the 100-level)

Major requirements:
a) Ten Labour Studies courses: 54-100; 54-105; 54-200; 54-204; 53/54-206; 54/48-225 (or 54/34-237);54-301; 54-218; 54/40-322 or 54/48-327 or 54/46-370, 54/43-349
b) Two of (if not taken under a): 54/48-225, 54/34-237, 54/40-322, 54/48-327,

54/48-332, 54/46-370, 54-401, 02-300, 48-321, 45-356.

Other requirements:
a) 02-250 and one of 40-234, 45-275, 48-290, or 48-390.
b) Two writing courses - 01-150 and 01-151**
c) Two courses from Arts
d) Two courses from Languages or Sciences

Recommended options (if any):
e) Five Additional Courses from any area to a total of twenty-five:

**Where the applicant has completed courses equivalent to 01-150 and 01-151, two other courses from any area of study will be substituted by the applicant.

Honours Labour Studies with Human Resources Certificate from Colleges of Arts and Technology Degree Completion Program
(Note: As of Fall 2013, there are no new admissions to this program.)

Admission Requirements
The ten listed St. Clair courses will count as five university courses towards the Honours degree. Students will be admitted to the program by applying to the University of Windsor. The normal FASS/ Labour Studies admission requirements apply.

Total courses: 35 courses plus the 10 required CAAT Courses* (with no more than 7 at the 100-level)

Major requirements:
a) Fifteen Labour Studies courses: 54-100; 54-105; 54-200; 54-204; 53/54-206; 54/48-225, 48-228, 45-248 or 54/48-332, {54/40-322}; 54-301; 54-218; 54/43-349; 54-401; two of 02-300, 54/34-237, 54/48-327, or 48-367.

Other requirements:
a) Two writing courses - 01-150 and 01-151**
b) 02-250 and one of 40-234, 45-275, 48-290, or 48-390.
c) Two courses from Arts
d) Two courses from Languages or Sciences
e)) Two courses from any areas of study excluding Social Science

Recommended options (if any):
h) Nine Additional Courses from any area to a total of thirty-five with at least seven at the 200 level or above.

**Where the applicant has completed courses equivalent to 01-150 and 01-151, two other courses from any area of study will be substituted by the applicant.

Note: To receive this degree, students must also complete a Ten Course Certificate from St. Clair or any other CAAT Business Program which satisfies the CHRP Designated Courses. At St Clair College, the course numbers and names are: MGN-440 Compensation and Employee Benefits, ACC 110 Accounting Concepts 1; ACC 422 Human Resources Accounting; MGN 340 Human Resource Management; MGN 480 Human Resources Planning; MGN 330 Industrial Relations 1; MGN 470 Occupational Health and Safety; MGN 310G Organizational Behaviour; MGN 500 Recruitment and Selection; MGN 450 Training and Development.

Standing Required for Continuation in Program
Students must obtain a 70% or higher in their Human Resources courses in order to satisfy the CHRP requirements, a requirement that is also needed for counting the courses as university courses. The usual Social Science regulations apply for the university courses.

Standing Required for Graduation
A cumulative average of 60% and a major average of 70% is required for the Honours degree; students with less than the required 70% will receive a four year degree if their cumulative and major averages are at least 60%.

LABOUR STUDIES: COURSES

Fall 2015 Undergraduate Calendar

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PSYCHOLOGY

PROGRAMS

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Honours Developmental Psychology
Honours Developmental Psychology with Thesis
BSc Honours Program in Behaviour, Cognition and Neuroscience
Combined Honours Programs in Psychology
Combined Honours Programs in Psychology with Thesis
Combined Honours Programs in Developmental Psychology
Combined Honours Programs in Developmental Psychology with Thesis
Major and Minor Concentrations - Bachelor of Arts and Science
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DISABILITY STUDIES (*joint programs with Social Work)*
BA Honours in Disability Studies
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Minor in Disability Studies

DEGREE COMPLETION PROGRAMS

General Psychology for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program
Child Psychology for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program
Honours Psychology for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program
Honours Psychology with Thesis for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program
Honours Developmental Psychology for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program
Honours Developmental Psychology with Thesis for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program

Additional Information: GENERAL UNDERGRADUATE REGULATIONS

General Psychology

Total courses: thirty.
Major requirements: ten courses, including 46-115 and 46-116, and at least two 300-level courses.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements: fourteen courses including
(a)01-150, 01-151;
(b)02-250;
(c)five courses from any area of study, including Psychology;
(d)six courses from any area of study, excluding Psychology.

RECOMMENDED COURSE SEQUENCE
First Year: 01-150, 01-151, 46-115, 46-116.
Second Year: 02-250, four psychology courses.
Third Year: two 300-level psychology courses, two additional psychology courses.

General Child Psychology

Total courses: thirty

Major requirements: ten courses including 46-115, 46-116, 46-223; at least four courses from the following list: 46-224, 46-322, 46-323, 46-324, 46-327; three

additional courses

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

*Other requirements:*twelve courses including:
(a) 01-150, 01-151;
(b) 02-250;
(b) five courses from any area of study, including Psychology;
(c) six courses from any area of study, excluding Psychology.

RECOMMENDED COURSE SEQUENCE
First Year: 01-150, 01-151, 46-115, 46-116.
Second Year: 02-250, 46-223, one of: 46-224, 46-322, 46-323, 46-324, 46-327; two additional psychology courses.
Third Year: three of: 46-224, 46-322, 46-323, 46-324, 46-327; one additional psychology course.

Honours Psychology

This program is intended for students who wish to study the discipline of psychology over a four-year period, including those who might wish to study at the graduate level in professions or disciplines other than psychology.

Total courses: forty.

Major requirements: eighteen courses, including 46-115, 46-116, 46-230, 46-320, 46-335 or 46-353 or 46-358. The total number of courses must include at least four 300-level courses and two 400-level courses.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements: sixteen courses including
(a)01-150, 01-151;
(b)02-250;
(c)five courses from any area of study, including Psychology;
(d)eight courses from any area of study, excluding Psychology.

RECOMMENDED COURSE SEQUENCE
First Year: 01-150, 01-151, 46-115, 46-116.
Second Year: 02-250, 46-230, three additional psychology courses.
Third Year: 46-320, one of: 46-335 or 46-353 or 46-358; two additional 300-level psychology courses, two additional psychology courses.
Fourth Year: two 400-level courses, four additional psychology courses.

Honours Psychology with Thesis

This program is oriented primarily toward students with a serious interest in psychological research who intend to study at the graduate level in psychology. Students taking this program should be able to do independent research (thesis) work, and have competence in statistics and research methods. In the fourth year, the program requires completion within a two-term period (Fall and Winter terms only) of a thesis. The thesis is an independent research study, completed in conjunction with a research advisor. Entry to the fourth year thesis course, 46-496, requires a cumulative course average of at least 75% and a major course average of at least 78%.

Total courses: forty.

Major requirements: eighteen courses, including 46-115, 46-116, 46-230, 46-313, 46-320, 46-331, 46-335 or 46-353 or 46-358, 46-496 and 46-497.
The total number of courses must include at least four 300-level courses and four 400-level courses

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;

(c) two courses from any area of study, excluding Social Sciences.

Other requirements: sixteen courses
(a) 01-150, 01-151;
(b) 02-250;
(c) five courses from any area of study, including Psychology;
(d) eight courses from any area of study, excluding Psychology.

RECOMMENDED COURSE SEQUENCE
First Year: 01-150, 01-151, 46-115,46-116.
Second Year: 02-250, 46-230, three additional psychology courses.
Third Year: 46-313, 46-320, 46-331, one of: 46-335 or 46-353 or 46-358; two additional psychology courses.
Fourth Year: 46-496 and 46-497, two 400-level courses, two additional psychology courses.

Honours Developmental Psychology

This program is intended for students who wish to study the discipline of lifespan developmental psychology (child, adolescent, and/or adult development) over a four-year period, including those who might wish to study at the graduate level in professions or disciplines other than psychology.

Total courses: forty.

Major requirements: eighteen courses, including 46-115, 46-116, 46-230, 46-320, 46-335 or 46-353 or 46-358, 46-427, and at least two 200-level courses, two 300-level courses, and one 400-level courses from the following list: 46-223, 46-224, 46-225, 46-322, 46-323, 46-324, 46-327, 46-421, 46-422, 46-423, 46-424, 46-425, 46-428.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

*Other requirements:*sixteen courses
(a)01-150, 01-151;
(b)02-250;
(c)five courses from any area of study, including Psychology;
(d)eight courses from any area of study, excluding Psychology.

RECOMMENDED COURSE SEQUENCE
First Year: 01-150, 01-151, 46-115, 46-116.
Second Year: 02-250, 46-230, two of: 46-223, 46-224, 46-225; one additional psychology course.
Third Year: 46-320, one of: 46-335 or 46-353 or 46-358; two of: 46-322, 46-323, 46-324, 46-327; two additional psychology courses.
Fourth Year: 46-427, two of: 46-421, 46-422, 46-423, 46-424, 46-425, 46-428; three additional psychology courses.

Honours Developmental Psychology with Thesis

This program is oriented primarily toward students with a serious interest in psychological research who intend to study at the graduate level in psychology. Students taking this program should be able to do independent research (thesis) work, and have competence in statistics and research methods. In the fourth year, the program requires completion within a two-term period (Fall and Winter terms only) of a thesis. The thesis is an independent research study, completed in conjunction with a research advisor. Entry to the fourth year thesis course, 46-496, requires a cumulative course average of at least 75% and a major course average of at least 78%.

Total courses: forty.

Major requirements: eighteen courses, including 46-115, 46-116, 46-230, 46-313, 46-320, 46-331, 46-335 or 46-353 or 46-358, 46-427, 46-496 and 46-497; and at least two 200-level courses, two 300-level courses, and one 400-level courses from the following list: 46-223, 46-224, 46-225, 46-322, 46-323, 46-324, 46-327, 46-421, 46-422, 46-423, 46-424, 46-425, 46-428.

Option requirements: six courses including
(a) two courses from Arts;

(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements: sixteen courses
(a)01-150, 01-151;
(b)02-250;
(b)five courses from any area of study, including Psychology;
(c)eight courses from any area of study, excluding Psychology.

RECOMMENDED COURSE SEQUENCE
First Year: 01-150, 01-151, 46-115, 46-116.
Second Year: 02-250, 46-230, two of: 46-223, 46-224, 46-225; one additional psychology course.
Third Year: 46-313, 46-320, 46-331, one of: 46-335 or 46-353 or 46-358; two of: 46-322, 46-323, 46-324, 46-327.
Fourth Year: 46-427, 46-496, 46-497, two of: 46-421, 46-422, 46-423, 46-424, 46-425, 46-428; one additional psychology course.

BSc Honours in Behaviour, Cognition and Neuroscience
(This program is also listed under Biological Sciences)

Neuroscience is a strong and growing field that strives to understand brain function at the molecular, behavioural and cognitive levels. This interdisciplinary program comprises required courses primarily from the departments of Biological Sciences and Psychology. Students also participate in bi-weekly research colloquia. In their final year, students prepare a research-based thesis in behaviour, cognition or neuroscience. Students must maintain an average of 70% or higher in Biology and Psychology courses. Entry to the fourth year thesis course, 46-496, requires a psychology average of 78% for Behaviour, Cognition and Neuroscience majors.

Total courses: forty.

Major requirements - Biological Sciences: 55-140, 55-141, 55-204, 55-210, 55-211, 55-213, 55-258, 55-341, 55-458, and 55-485; plus one additional biology course~~s~~.

Major requirements - Psychology: 46-115, 46-116, 46-223, 46-256, 46-313, 46-322 (or 46-323), 46-353, 46-335, 46-358 and 46-457.

Major requirements - Biological Sciences or Psychology: 55-323 or 46-355; 55-320 ~~(~~or 46-230~~)~~; and an honours thesis in the area of behavioural or cognitive neuroscience chosen from 55-420, or 46-496 and 46-497, or 59-410.

Other requirements:
(a) 65-205 ~~(~~or 02-250~~)~~;
(b) one pair of both 64-130 and 64-131, or both 64-140 and 64-141, or both 60-104 (or 60-106) and 60-205, or both 66-140 and 66-141, or both 66-100 and 66-102
(c) 59-140, 59-141, 59-230, 59-261;
(d) two courses from Arts and Social Sciences excluding Psychology;
(e) four courses at 300 level or above in Biology, Chemistry, Psychology, or Kinesiology;
(f) two courses from any area of study (62-130) is recommended).

Non-credit course: Colloquia and Seminars in Current Behaviour, Cognitive and Neuroscience Research: bi-weekly presentations of recent research by investigators within the university and from other universities and research institutions. Attendance by key faculty members and all students is expected. A notation will be added to the student's transcript upon successful completion of the course.

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 55-140, 55-141, 59-140, 59-141, 46-115, 46-116, 02-250 ~~(~~or 65-205~~)~~; at least one pair of both 64-140 and 64-141 or both 60-104 (60-106) and 60-205, or both 66-140 and 66-141, or both 66-100 and 66-102, and one optional course (62-130 recommended).
Second Year: ten courses, including 55-204, 55-210, 55-211, 55-213, 55-258, 46-223, 46-256, 59-230 and 59-261.
Third Year: ten courses, including 55-320 ~~(~~or 46-230~~)~~, 55-341, 55-323 or 46-355*, 46-353, 46-358, and 46-313
Fourth Year: ten courses: including 46-322 (or 46-323), 46-335, 55-485, 46-457, 55-420 ~~(~~or 46-496 and 46-497, or 59-410), and 55-458.

*55-323 or 46-355 should be taken in third or fourth year.

55-323 should be taken in third or fourth year.

Combined Honours Programs in Psychology

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements - Psychology: fourteen courses, including 46-115, 46-116, 46-230, and 46-320 and one of 46-335, 46-353 or 46-358. The total number of Psychology courses must include at least four 300-level courses and two 400-level courses.

Major requirements - Other Subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) 02-250;
(c) additional courses from any area of study to a total of forty courses.

RECOMMENDED COURSE SEQUENCE
First Year: 01-150, 01-151, 46-115, 46-116.
Second Year: 02-250, 46-230, two additional psychology courses.
Third Year: 46-320, one of: 46-335 or 46-353 or 46-358; two additional 300-level psychology courses.
Fourth Year: two 400-level psychology courses, three additional psychology courses.

Combined Honours Programs in Psychology with Thesis

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements - Psychology: fourteen courses, including 46-115, 46-116, 46-230, 46-320, 46-331; plus 46-313 or an equivalent statistics course from another area of study; plus one of 46-335, 46-353 or 46-358; and 46-496 and 46-497. The total number of Psychology courses must include at least four 300-level courses. Entry to the fourth year thesis course, 46-496, requires a cumulative course average~~s~~ of at least 75% and a major course average of at least 78%.

Major requirements - Other Subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:

(a) 01-150, 01-151;
(b) 02-250;
(c) additional courses from any area of study to a total of forty courses.

RECOMMENDED COURSE SEQUENCE
First Year: 01-150, 01-151, 46-115, 46-116.
Second Year: 02-250, 46-230, two additional psychology courses.
Third Year: 46-313 or equivalent, 46-320, 46-331, one of: 46-335 or 46-353 or 46-358.
Fourth Year: 46-496, 46-497, five additional psychology courses.

Combined Honours Programs in Developmental Psychology

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements - Developmental Psychology: fourteen courses, including 46-115, 46-116, 46-230, 46-320, 46-335 or 46-353 or 46-358, 46-427, and six of: 46-223, 46-224, 46-225, 46-322, 46-323, 46-324, 46-327, 46-421, 46-422, 46-423, 46-424, 46-425, 46-428. The total number of Psychology courses must include at least four 300-level courses and two 400-level courses.

Major requirements - Other Subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) 02-250;
(c) additional courses from any area of study to a total of forty courses.

RECOMMENDED COURSE SEQUENCE
First Year: 01-150, 01-151, 46-115, 46-116.
Second Year: 02-250, 46-230, two of: 46-223, 46-224, 46-225.
Third Year: 46-320, one of: 46-335 or 46-353 or 46-358; two of: 46-322, 46-323, 46-324, 46-327.
Fourth Year: 46-427, one of: 46-421, 46-422, 46-423, 46-424, 46-425, 46-428; one of: 46-223, 46-224, 46-225, 46-322, 46-323, 46-324, 46-327, 46-421, 46-422, 46-423, 46-424, 46-425, 46-428; two additional psychology courses.

Combined Honours Programs in Developmental Psychology with Thesis

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

*Major requirements - Developmental Psychology:*fourteen courses, including 46-115, 46-116, 46-230, 46-313 or an equivalent statistics course from another area of study, 46-320, 46-331, 46-335 or 46-353 or 46-358, 46-427, 46-496, 46-497, and four of: 46-223, 46-224, 46-225, 46-322, 46-323, 46-324, 46-327, 46-421, 46-422, 46-423, 46-424, 46-425, 46-428. The total number of Psychology courses must include at least four 300-level courses. Entry to the fourth year thesis course, 46-496, requires a cumulative course average of at least 75% and a major course

average of at least 78%.

Major requirements - Other Subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) 02-250;
(c) additional courses from any area of study to a total of forty courses.

RECOMMENDED COURSE SEQUENCE
First Year: 01-150, 01-151, 46-115, 46-116.
Second Year: 02-250, 46-230, two of: 46-223, 46-224, 46-225.
Third Year: 46-313 or equivalent, 46-320, 46-331, one of: 46-335 or 46-353 or 46-358; one of: 46-322, 46-323, 46-324, 46-327.
Fourth Year: 46-427, 46-496, 46-497, one of: 46-223, 46-224, 46-225, 46-322, 46-323, 46-324, 46-327, 46-421, 46-422, 46-423, 46-424, 46-425, 46-428.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Psychology (With Thesis)
Major Concentration: 46-115; 46-116; 46-230; 02-250; 46-313; 46-320; 46-331; 46-496; 46-497*; one of 46-335, 46-353, 46-358; two additional Psychology courses.
*46-496 and 46-497 will take the place of 56-420. An additional option course from FASS or Science will need to be completed.

Psychology (Without Thesis)
Major Concentration: 46-115; 46-116; 46-230; 02-250; 46-313; 46-320; 46-331; one of 46-335, 46-353, 46-358; two additional Psychology courses.

Minor Concentration: 46-115; 46-116; two 200-level courses; one 300-level course; one 400-level course.

RECOMMENDED COURSE SEQUENCE- Major Concentration
First Year: 46-115, 46-116.
Second Year: 46-230, one additional psychology course.
Third Year: one of: 46-335 or 46-353 or 46-358; two 300-level psychology courses, one additional psychology course.
Fourth Year: one 300-level or 400-level psychology course, one 400-level psychology course.

RECOMMENDED COURSE SEQUENCE - Minor Concentration
First Year: 46-115, 46-116.
Second Year: two 200-level psychology courses.
Third Year: one 300-level psychology course.
Fourth Year: one 400-level psychology course.

Minor in Child Psychology

Requirements: Six courses in Psychology, including 46-115, 46-116, and four of 46-223, 46-224, 46-322, 46-323, 46-324, 46-327, 46-421, 46-422, 46-423, 46-424, 46-425, and 46-427.

Minor in Psychology

Requirements: Six courses in Psychology, including 46-115, 46-116, and four courses at the 200 level or above.

General Psychology for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program

Total courses: fifteen, plus a minimum of an Ontario College of Applied Arts and Technology Child and Youth Worker diploma with the following stipulation:
In cases where a student previously completed a university course or courses, the course(s) will not be used to fulfill the 15 course degree requirements if they were used by the College of Applied Arts and Technology to grant advanced standing in the diploma or certificate program. In such cases, the Psychology Undergraduate

Program Chair (or designate) will identify a substitute course requirement.

Students are strongly advised to enroll in this program in the Summer semester so they can complete at least two of the required Year 1 courses before the Fall semester.

Students are strongly advised to consult with a Psychology academic advisor before registering for courses in this program.

Major requirements: seven courses, including 46-115, two 300-level courses; and four 200, 300 or 400-level courses (excluding 46-223).

Option requirements: three courses including
(a) two courses from Arts, Languages or Science;
(b) one course from any area of study, excluding Social Sciences.

Other requirements: five courses including
(a) 02-250;
(b) four courses from any area of study, including Psychology (excluding 46-116, 46-223).

RECOMMENDED COURSE SEQUENCE
Third Year: 46-115, 02-250, three 200, 300 or 400-level psychology courses, two courses from Arts, Languages or Science; one course from any area of study, excluding Social Sciences; two courses from any area of study, including Psychology (excluding 46-116, 46-223).
Fourth Year: one 200, 300 or 400 level psychology course, two 300-level psychology courses; two courses from any area of study, including Psychology (excluding 46-116, 46-223).

Child Psychology for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program

Total courses: fifteen, plus a minimum of an Ontario College of Applied Arts and Technology Child and Youth Worker diploma with the following stipulation:
In cases where a student previously completed a university course or courses, the course(s) will not be used to fulfill the 15 course degree requirements if they were used by the College of Applied Arts and Technology to grant advanced standing in the diploma or certificate program. In such cases, the Psychology Undergraduate Program Chair (or designate) will identify a substitute course requirement.

Students are strongly advised to enroll in this program in the Summer semester so they can complete at least two of the required Year 1 courses before the Fall semester.

Students are strongly advised to consult with a Psychology academic advisor before registering for courses in this program.

*Major requirements:*seven courses, including 46-115, 46-224, 46-324, 46-327, three 200, 300 or 400 level courses (excluding 46-223).

Option requirements: three courses including
(a) two courses from Arts, Languages or Science;
(b) one course from any area of study, excluding Social Sciences.

Option requirements: five courses including
(a) 02-250;
(b) four courses from any area of study, including Psychology (excluding 46-116, 46-223).

RECOMMENDED COURSE SEQUENCE
Third Year: 46-115, 46-224, 02-250, three 200, 300 or 400-level psychology courses, two courses from Arts, Languages or Science, one course from any area of study, excluding Social Sciences, one course from any area of study, including Psychology (excluding 46-116, 46-223).
Fourth Year: 46-324, 46-327, three courses from any area of study, including Psychology (excluding 46-116, 46-223).

Honours Psychology for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program

Total courses: twenty, plus a minimum of an Ontario College of Applied Arts and Technology Child and Youth Worker diploma with the following stipulation:

In cases where a student previously completed a university course or courses, the course(s) will not be used to fulfill the 20 course degree requirements if they were used by the College of Applied Arts and Technology to grant advanced standing in the diploma or certificate program. In such cases, the Psychology Undergraduate Program Chair (or designate) will identify a substitute course requirement.

Students are strongly advised to enroll in this program in the Summer semester so they can complete at least two of the required Year 1 courses before the Fall semester.

Students are strongly advised to consult with a Psychology academic advisor before registering for courses in this program.

Major requirements: eleven courses, including 46-115, 46-230, 46-320, one of: 46-335, 46-353, 46-358; two 300-level courses, three 400-level courses, two additional 200, 300 or 400-level courses (excluding 02-46-223).

Option requirements: three courses including
(a) two courses from Arts, Languages or Science;
(b) one course from any area of study, excluding Social Sciences.

Other requirements: six courses including
(a) 02-250;
(b) five courses from any area of study, including Psychology (excluding:46-116, 46-223).

RECOMMENDED COURSE SEQUENCE
Third Year: 02-250, 46-115, 46-230, two 200, 300 or 400-level psychology courses (excluding 02-46-223), two courses from Arts, Languages or Science, one course from any area of study, excluding Social Sciences, two courses from any area of study, including Psychology (excluding: 46-116, 46-223).
Fourth Year: 46-320, one of 46-335, 46-353 or 46-358; two 300-level psychology courses, three 400-level psychology courses, three courses from any area of study, including Psychology (excluding: 46-116, 46-223).

Honours Psychology with Thesis for Ontario College Child and Youth Worker Program Graduates- Degree Completion Program

Total courses: twenty, plus a minimum of an Ontario College of Applied Arts and Technology Child and Youth Worker diploma with the following stipulation:
In cases where a student previously completed a university course or courses, the course(s) will not be used to fulfill the 20 course degree requirements if they were used by the College of Applied Arts and Technology to grant advanced standing in the diploma or certificate program. In such cases, the Psychology Undergraduate Program Chair (or designate) will identify a substitute course requirement.

Students are strongly advised to enroll in this program in the Summer semester so they can complete at least two of the required Year 1 courses before the Fall semester.

Students are strongly advised to consult with a Psychology academic advisor before registering for courses in this program.

Major requirements: eleven courses including 46-115, 46-230, 46-313, 46-320, 46-331, one of: 46-335, 46-353, 46-358; 46-496, 46-497, one 400-level course, two 200-, 300- or 400-level courses (excluding 46-223).

Option requirements: three courses including
(a) two courses from Arts, Languages or Science;
(b) one course from any area of study, excluding Social Sciences ~~(excluding: 95-398)~~.

Other requirements: six courses including
(a) 02-250;
(b) five courses from any area of study, including Psychology.

RECOMMENDED COURSE SEQUENCE
Third Year: 02-250, 46-115, 46-230, 46-320, 46-331, one of: 46-335, 46-353, 46-358, two courses from Arts, Languages or Science, one course from any area of study, excluding Social Sciences, one course from any area of study, including Psychology (excluding 46-116, 46-223).
Fourth Year: 46-313, 46-496, 46-497, one 400-level psychology course, two 200, 300 or 400 level psychology courses (excluding 46-223), four courses from any

area of study, including Psychology (excluding: 46-116, 46-223).

Honours Developmental Psychology for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program

Total courses: twenty, plus a minimum of an Ontario College of Applied Arts and Technology Child and Youth Worker diploma with the following stipulation:
In cases where a student previously completed a university course or courses, the course(s) will not be used to fulfill the 20 course degree requirements if they were used by the College of Applied Arts and Technology to grant advanced standing in the diploma or certificate program. In such cases, the Psychology Undergraduate Program Chair (or designate) will identify a substitute course requirement.

Students are strongly advised to enroll in this program in the Summer semester so they can complete at least two of the required Year 1 courses before the Fall semester.

Students are strongly advised to consult with a Psychology academic advisor before registering for courses in this program.

Major requirements: eleven courses including 46-115, one of: 46-224 or 46-225; 46-230, 46-320, one of: 46-335, 46-353, 46-358; two of: 46-421, 46-422, 46-423, 46-424, 46-425, 46-428; two 300-level courses, one 400-level course, one 200-, 300-, or 400-level course.

Option requirements: three courses including
(a) two courses from Arts, Languages or Science;
(b) one course from any area of study, excluding Social Sciences.

Other requirements: six courses including
(a) 02-250;
(b) five courses from any area of study, including Psychology.

RECOMMENDED COURSE SEQUENCE
Third Year: 02-250, 46-115, one of: 46-224 or 46-225; 46-230, 46-320, one of: 46-335, 46-353, 46-358, one 200-, 300-, or 400-level psychology course (excluding 46-223), two courses from Languages or Science, one course from any area of study, including Psychology (excluding 46-116, 46-223).
Fourth Year: two of: 46-421, 46-422, 46-423, 46-424, 46-425, 46-428, one additional 400-level course, two 300-level psychology courses, one course from any area of study, excluding Social Sciences (excluding 95-398), four courses from any area of study, including Psychology (excluding: 46-116, 46-223).

Honours Developmental Psychology with Thesis for Ontario College Child and Youth Worker Program Graduates - Degree Completion Program

Total courses: twenty, plus a minimum of an Ontario College of Applied Arts and Technology Child and Youth Worker diploma with the following stipulation:
In cases where a student previously completed a university course or courses, the course(s) will not be used to fulfill the 20 course degree requirements if they were used by the College of Applied Arts and Technology to grant advanced standing in the diploma or certificate program. In such cases, the Psychology Undergraduate Program Chair (or designate) will identify a substitute course requirement.

Students are strongly advised to enroll in this program in the Summer semester so they can complete at least two of the required Year 1 courses before the Fall semester.

Students are strongly advised to consult with a Psychology academic advisor before registering for courses in this program.

Major requirements: eleven courses including 46-115, one of: 46-224 or 46-225; 46-230, 46-313, 46-320, one of: 46-335, 46-353, 46-358; 46-331, two of: 46-421, 46-422, 46-423, 46-424, 46-425, 46-428; 46-496, 46-497;

Option requirements: three courses including
(a) two courses from Arts, Languages or Science;
(b) one course from any area of study, excluding Social Sciences.

Other requirements: six courses including
(a) 02-250;
(b) five courses from any area of study, including Psychology (excluding: 46-116,

46-223).

RECOMMENDED COURSE SEQUENCE
Third Year: 02-250, 46-115, one of: 46-224 or 46-225; 46-230, 46-320, one of: 46-335, 46-353, 46-358; 46-331, two courses from Arts, Languages or Science, one course from any area of study, excluding Social Sciences.
Fourth Year: 46-313, 46-496, 46-497, two of: 46-421, 46-422, 46-423, 46-424, 46-425, 46-428, five courses from any area of study, including Psychology (excluding: 46-116, 46-223).

PSYCHOLOGY: COURSES

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KINESIOLOGY

PROGRAMS
Bachelor of Human Kinetics (Honours Kinesiology) with Movement Science Major
Bachelor of Human Kinetics (Honours Kinesiology) with Sport Management Major
Bachelor of Human Kinetics (Honours Kinesiology) with Sport Studies

DEGREE COMPLETION PROGRAM
Bachelor of Human Kinetics (Honours Kinesiology) with Sport Management Major for Graduates of Lambton College's Sport and Recreation Administration program
Bachelor of Human Kinetics (Honours Kinesiology) with Sport Management Major for Graduates in the School of Business, IT and Management at Durham College

Additional Information: Kinesiology Program Information, "Core" Courses, and Co-operative Education
GENERAL UNDERGRADUATE REGULATIONS

Bachelor of Human Kinetics (Honours Kinesiology) with Movement Science Major

Students selecting this major will be interested in entering the general field of science as it relates to human activity as teachers, exercise consultants, sport therapists, athletic trainers, ergonomic specialists in the biomechanics of movement, and human performance specialists in motor development and memory. This program is recognized by the Ontario Kinesiology Association. Those interested in graduate studies in Movement Science should select this major. Graduates are also qualified to enter a Faculty of Education.

Total courses: forty.

Major requirements:

Human Kinetics Core: fourteen courses including 95-200, 95-205, 95-265, 95-225, 95-211, 95-280, 95-250, 95-269, 95-270; plus five of 95-210, 95-230, 95-240, 95-260, 95-285, 95-224, 95-222 (or 95-350).

Movement Science Courses: twelve courses including ten of 95-301, 95-302, 95-303, 95-304, 95-306, 95-310, 95-360, 95-362, 95-400, 95-408, 95-410, 95-433, 95-453, 95-458, 95-460, 95-461, 95-462, 95-463, 95-464, 95-465, 95-471, 95-475, 95-480, 95-485, 95-490, or 95-498; plus two of 95-491, 95-492, and 95-493.

Other requirements:
(a) six courses from Engineering, Nursing, Psychology and/or Science.
(b) six courses from any area of study, excluding Kinesiology.
(c) two courses from any area of study, including Kinesiology.

Program Sequencing

Year 1

<u>Fall Semester</u>
95-265 Functional Anatomy
95-225 Ethics in Sport
95-211 Principles of Mental Skills Training
95-280 Fundamental Mechanics of Human Motion
Option

<u>Winter Semester</u>
95-200 Health and Wellness
95-205 Introduction to Exercise Physiology
95-250 Principles of Sport Management
95-269 Measurement and Evaluation
Option

Year 2

95-270 Research Design

Choose 5 of the following:

95-210 Human Performance
95-230 Sociology of Sport and Physical Activities
95-240 Historical Perspectives on Physical Activity and Sport in Western Civilization
95-260 Physiology of Fitness
95-285 Human Growth and Development
95-350 Organizational Behaviour
95-222 Introduction to Leisure
95-224 Introduction to Occupational Biomechanics/Ergonomics
Plus, 4 Option courses

Years 3 and 4

Note: Students must successfully complete Introduction to Ergonomics, Physiology of Fitness, and Human Performance in second year to complete this major

Take 10 of the following:

95-301 Use and Abuse of Drugs
95-302 Exercise and Fitness Psychology
95-303. Imagery Effects on Performance
95-304 Sport Nutrition
95-306 Obesity and Eating Disorders
95-310 Motor Control
95-360 Physiology of Exercise
95-362 Human Factors and Work Performance
95-400 Human Movement and Aging
95-408 Dynamics of Skill Acquisition
95-410 Physical Activity for Special Populations
95-433. Selected Topics in Sport Leadership
95-453 Perceptual Motor Development
95-458 The Endocrine System in Sport, Exercise and Health
95-460 Cardiovascular Physiology
95-461. Chronic Disease and Exercise Rehabilitation
95-462. Exercise in Extreme Environments
95-463 Applied Neurophysiology
95-464.The Pathophysiology of Pain
95-465 Ergonomics and Injury Prevention
95-471 Physiological Basis of Sports Therapy
95-475 Individual Studies
95-480 Advanced Biomechanics
95-485 Group Dynamics in Sport
95-490 Special Topics
95-498 Internship

Take 2 of the following:

95-491 Lab course in Biomechanics and Ergonomics
95-492 Lab course in Human and Exercise Physiology
95-493 Lab course in Motor Learning and Psychology of Physical Activity

Plus 8 Options.
At least 6 must be from Science, Psychology, Engineering and/or Nursing.
Up to 2 may be other Kinesiology courses
[of the 8 options, at least 6 must be at the 200 level or above]

Bachelor of Human Kinetics (Honours Kinesiology) with Sport Management Major

Students completing this major will be interested in examining leisure from a social science perspective and/or preparing for employment opportunities related to the administration of leisure, sport and physical activity programs. Graduates typically assume positions with government agencies, municipal recreation units, public and private recreation units, public and private recreation centers, and amateur or professional sports organizations. Graduates also are prepared to enter graduate

school or a faculty of education.

Total courses: forty.

Human Kinetics Core: fourteen courses including 95-200, 95-205, 95-211,95-225, 95-250, 95-265, 95-269, 95-270, 95-280; plus five of 95-210, 95-230, 95-240, 95-260, 95-285, 95-222, 95-224 (or 95-350).

Sport Management Courses: twelve of 95-340, 95-345, 95-351, 95-352, 95-355, 95-402, 95-405, 95-433, 95-450, 95-451, 95-452, 95-454, 95-455, 95-456, 95-473, 95-475, 95-XXX Business Ethics (new course to be developed), 95-490, and 95-498.

Other requirements:
(a) six courses from Arts and Social Sciences and/or Business.
(b) six courses from any area of study, excluding Kinesiology.
(c) two courses from any area of study, including Kinesiology.

Program Sequencing

Year 1
Fall Semester
95-265 Functional Anatomy
95-225 Ethics in Sport
95-211 Principles of Mental Skills Training
95-280 Fundamental Mechanics of Human Motion
Option

Winter Semester
95-250 Principles of Sport Management
95-269 Measurement and Evaluation
95-200 Health and Wellness
95-205 Introduction to Exercise Physiology
Option

Year 2
95-270 Research Design

Choose 5 of the following:

95-210 Human Performance
95-230 Sociology of Sport and Physical Activities
95-240 Historical Perspectives on Physical Activity and Sport in Western Civilization
95-260 Physiology of Fitness
95-285 Human Growth and Development
95-350 Organizational Behaviour
95-222 Introduction to Leisure
95-224 Introduction to Occupational Biomechanics/Ergonomics

Plus, 4 Option courses

Years 3 and 4

Note: Students must successfully complete Historical Perspectives on Physical Activity and Sport in Western Civilization, Sociology of Sport and Physical Activities, and Organizational Behaviour in second year to complete this major.

Take 12 of the following:

95-340 History of the Modern Olympic Movement
95-345 Sport Marketing
95-351 Strategic Planning of Sports Events
95-352 Sport Finance
95-355 Socio-economic Aspects of Sport and Leisure
95-402. Sport Tourism
95-405 Gender Issues in Sport
95-433. Selected Topics in Sport Leadership
95-450 Human Resources in Sport Management
95-451 Sport and the Law
95-452 Sport and Government
95-454 Cooperation and Conflict in Sport
95-455. Global Issues in Sport Management
95-456. Sport Communication

95-473 Social Construction of Leisure
95-475 Individual Studies
95-490 Special Topics
95-498 Internship
95-XXX Business Ethics (new course to be developed)

Plus, 8 Option courses
At least 6 must come from the Faculty of Arts and Social Science and/or the Faculty of Business
Up to 2 options may be from other Kinesiology courses.
[of the 8 options, at least 6 must be at the 200 level or above]

Bachelor of Human Kinetics (Honours Kinesiology) with Sport Studies

Total courses: forty.

Human Kinetics Core: fourteen courses including 95-200, 95-205,95-265, 95-225, 95-211, 95-280, 95-250, 95-269, 95-270; plus five of 95-210, 95-230, 95-240, 95-260, 95-285, 95-XXX (Introduction to Ergonomics - new course to be developed), 95-XXX (Introduction to Leisure Studies - new course to be developed), or 95-350.

Sport Studies Courses: fourteen courses including ten of 95-306, 95-311, 95-325, 95-333, 95-351, 95-370, 95-404, 95-405, 95-408, 95-410, 95-440, 95-453, 95-471, 95-475, 95-476, 95-477, 95-490, and 95-498; plus four practice, theory, and analysis courses.

Other requirements:
(a) twelve courses from any area of study, excluding Kinesiology.

***Note:** Students must successfully complete Growth and Development, Introduction to Leisure Studies, and Historical Perspectives on Physical Activity and Sport in Western Civilization in their second year in order to complete this major.

Program Sequencing

Year 1

<u>Fall Semester</u>
95-265 Functional Anatomy
95-225 Ethics in Sport
95-211 Principles of Mental Skills Training
95-280 Fundamental Mechanics of Human Motion
Option

<u>Winter Semester</u>
95-200 Health and Wellness
95-205 Introduction to Exercise Physiology
95-250 Principles of Sport Management
95-269 Measurement and Evaluation
Option

Year 2

95-270 Research Design

Choose 5 of the following:
95-210 Human Performance
95-230 Sociology of Sport and Physical Activities
95-240 Historical Perspectives on Physical Activity and Sport in Western Civilization
95-260 Physiology of Fitness
95-285 Human Growth and Development
95-350 Organizational Behaviour
95-222 Introduction to Leisure
95-224 Introduction to Occupational Biomechanics/Ergonomics

Plus, 4 Option courses

Years 3 and 4

Note: Students must successfully complete Growth and Development, Introduction to Leisure Studies, and Historical Perspectives on Physical Activity and Sport in

Western Civilization in their second year in order to complete this major.

Take 10 of the following:
95-306 Obesity and Eating Disorders
95-311 Psychology of Leisure
95-325 Philosophy of Sport and Physical Activity
95-333 Applied Sport Psychology
95-351 Strategic Planning of Sports Events
95-370 Scientific Basis of Conditioning
95-404 Population Health
95-405 Gender Issues in Sport
95-408 Dynamics of Skill Acquisition
95-410 Physical Activity for Special Populations
95-440 History of Sport in Canada
95-453. Perceptual-Motor Development
95-471 Physiological Basis of Sports Therapy
95-475 Individual Studies
95-476 Principles of Coaching
95-477 Outdoor Recreation
95-490 Special Topics
95-498 Internship

Plus, 10 Option courses
Take 4 Practice, Theory, and Analysis courses.
Take 6 non-kinesiology options (aspiring intermediate-senior teachers college applicants, combine with core options to earn a second teachable subject designation)
[of the 6 options, at least 4 must be at the 200 level or above]

Bachelor of Human Kinetics (Honours Kinesiology) with Sport Management Major for Graduates of Lambton College's Sport and Recreation Administration program

A student may enter the Bachelor of Human Kinetics (Sport Management) program after completing the three-year Diploma in Sports and Recreation Administration with a cumulative average equivalent to a B or better.

Total Courses: 20

These students will have to complete the following courses in order to fulfill the requirements of the BHK program with a major in Sport Management:

95-211. Principles of Mental Skills Training
95-265. Functional Anatomy
95-280. Fundamental Mechanics of Human Motion
95-200. Health and Wellness
95-205. Introduction to Exercise Physiology
95-269. Measurement and Evaluation
95-270. Research Design
95-240. Historical Perspectives on Physical Activity and Sport in Western Civilization
95-350. Organizational Behaviour

Two courses from: 95-210, 95- 260, 95- 285, 95-222, 95-224

9 Sport Management major courses

NB: Transfer credit obtained through this articulation agreement is subject to re-evaluation in cases where the student decides to transfer into another program at the University.

Bachelor of Human Kinetics (Honours Kinesiology) with Sport Management Major for Graduates of Durham College's Sport Management Program

A student may enter the Bachelor of Human Kinetics (Sport Management) program after completing the three-year Diploma in Sport Management with a cumulative average equivalent to a B or better. Students must have passed each of their respective College courses with a grade equivalent to a B or better.

Total Courses: 20

These students will have to complete the following courses in order to fulfill the requirements of the BHK program with a major in Sport Management:

Year 1 and 2 courses
95-211 Principles of Mental Skills Training
95-225 Ethics in Sport
95-265 Functional Anatomy
95-280 Fundamental Mechanics of Human Motion
95-200 Health and Wellness
95-205 Introduction to Exercise Physiology
95-230 Sociology of Sport
95-269 Measurement and Evaluation
95-270 Research Design

Year 3 and 4 courses
6 Sport Management major courses
5 Non-Kinesiology options from Arts, Social Science, or Business

KINESIOLOGY: COURSES

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FACULTY OF ARTS, HUMANITIES AND SOCIAL SCIENCES (FAHSS)

PROGRAMS ADMINISTERED BY THE OFFICE OF THE DEAN OF FAHSS:

General Liberal Arts and Professional Studies
Honours Liberal Arts and Professional Studies

Honours Liberal Arts and Professional Studies: Aeronautics Leadership (Flight Option)

Degree Completion Programs -
- General Liberal Arts and Professional Studies (for Lambton College Liberal Studies Transfer Students (formerly General Arts and Science University (GASU) transfer students)
- Honours Liberal Arts and Professional Studies (for Lambton College Liberal Studies Transfer Students (formerly General Arts and Science University (GASU) transfer students)
- General Liberal Arts and Professional Studies for Career Professionals (for Graduates of Qualifying CAAT (or equivalent) Diploma Programs)
- General Liberal Arts and Professional Studies for Career Professionals (for Graduates of Qualifying CAAT (or equivalent) Advanced Diploma Programs)

Concurrent Bachelor of Arts/ Bachelor of Education/Diploma in Early Childhood Education

Combined Honours in Social Justice
Minor in Social Justice

Discovery Program (Undeclared Majors)

Minor in Latin American Studies

Certificate in Arts Management

Additional Information: GENERAL UNDERGRADUATE REGULATIONS

General Liberal Arts and Professional Studies
Total courses: thirty, at least sixteen of which must be at the 200 level or above, and at least four of which must be at the 300 level or above. Students may take no more than eight courses in any single subject area.

Requirements:
(a) six courses from Arts and Humanities;
(b) six courses from Social Sciences;
(c) four courses from Science or Engineering*;
(d) four courses from Business Administration;
(e) eight additional courses from any area of study.

Other requirements:
(a) 01-150, 01-151

*The following Engineering courses are available to non-Engineering students: 85-118, 87-482.

STANDING REQUIRED

Students in the Liberal and Professional Studies program must maintain a cumulative average of 60% or better. There is no major average requirement.

Honours Liberal Arts and Professional Studies

*Total courses:*40, at least eight of which must be at the 300 level or above, and a least two of these at the 400 level.

Major Requirements: twenty-six courses, as given below:
a) 01-150 Effective Writing I

b) 01-151 Effective Writing II
c) 8 courses chosen from Arts and Languages
d) 8 courses chosen from Social Sciences
e) 4 courses chosen from Business
f) 4 courses from Science, Engineering, or Computer Science

Other requirements:
a)14 courses from any area of study

Honours in Liberal Arts and Professional Studies: Aeronautics Leadership

Flight Option

Total courses: 40

Major requirements:
a) 14 courses from Arts, Humanities and Social Sciences, including 6 Leadership courses chosen from

01-120 Understanding the Contemporary World (double credit)
01-200 Ways of Doing
01-210/02-210 Ways of Knowing
01-209 Ethics in the Professions
24-210/40-210 Speech Communication to Inform
02-350/48-350 Practical Strategies for Social Change: Intervening to Prevent Sexual Assault
27-385 Green Corridor (Prerequisites: at least Semester 5 and in good standing)
01-400/02-400 Mentorship and Learning (Prerequisites: at least Semester 5, or with consent of the instructor)
02-450 Practicum in Social Change (Prerequisite: 02-350/48-350)

b) 3 courses from Business
71-243 Human Resources Management (prerequisite 75-100)
71-452 Management of Organizational Health, Wellness and Safety (prerequisite 71-243)
75-100 Introduction to Business

c) 4 courses from Science, Engineering, or Computer Science
8 courses in Flight Training
02-197 Practicum in Professional Development (double credit)
02-297 Practicum in Professional Development (double credit)
02-397 Practicum in Professional Development (double credit)
02-497 Practicum in Professional Development (double credit)

Other requirements:
01-150 Effective Writing I
01-151 Effective Writing II
9 courses from any area of study

General Liberal Arts and Professional Studies Degree Completion Program (for Lambton College Liberal Studies Transfer students) (formerly General Arts and Science University (GASU) transfer students)

Total courses: 20.
At least 16 courses must be at the 200 level or above, and 4 of these must be at the 300 level or above. No more than eight courses may be taken in any one area.

Major requirements:
(a) four courses from Arts and Humanities;
(b) four courses from Social Sciences
(c) two courses from Business Administration
(d) two courses from Science, Engineering or Computer Science

Other requirements: eight additional courses from any area of study.

Honours Liberal Arts and Professional Studies Degree Completion Program (for Lambton College Liberal Studies Transfer students) (formerly General Arts and Science University (GASU) transfer students)

Total courses: 30
At least 26 courses must be at the 200 level or above. Eight courses must be at the 300 level or above, and a least two of these at the 400 level.

Major requirements:
(a) eight courses from Arts and Humanities;
(b) eight courses from Social Sciences
(c) four courses from Business or selected related courses
(d) four courses from Science, Engineering or Computer Science

Other requirements: six additional courses from any area of study.

General Liberal Arts and Professional Studies for Career Professionals Degree Completion Program (for Graduates of Qualifying CAAT (or equivalent) Diploma Programs)

Students who have graduated from an approved CAAT college diploma (or equivalent) with a suggested cumulative average of 3.0 (70%) or higher in their final ten courses will be considered for admission. Approved CAAT college diploma programs include: Border Services, Business programs, Dental Hygiene, Developmental Service Worker, Early Childhood Education, Educational Support, Engineering, General Arts and Science, Journalism, Liberal Arts, Music – Industry Arts, Paramedic, Police Foundations, Protection, Security, and Investigation, Recreation and Leisure Services, Social Service Worker.

Total courses: 20 courses
At least 16 courses must be at the 200 level or above, and 4 of these must be at the 300 level or above. No more than eight courses may be taken in any one area.

Major requirements:
(a) four courses from Arts and Humanities;
(b) four courses from Social Sciences
(c) two courses from Business Administration
(d) two courses from Science, Engineering or Computer Science

Other requirements: eight additional courses from any area of study.

Recommended options (if any):
Students are recommended to complete an e-portfolio and present it to the program coordinator or designate before they graduate.
The courses Ways of Knowing and Ways of Doing are designed to target College transfer students and distance education learners. Students should consider taking these courses so that they develop a sense of cohort.

General Liberal Arts and Professional Studies for Career Professionals Degree Completion Program (for Graduates of Qualifying CAAT (or equivalent) Advanced Diploma Programs)

Students who have graduated from a CAAT college advanced diploma with a suggested cumulative average of 3.0 (70%) or higher in their final ten courses will be considered for admission. Approved Advanced Diploma Programs include: Business Administration, Child and Youth Care/Child and Youth Worker, Computer Science or Computer Programming or Information Technology, Dental Hygiene (the province has recently changed the program to an advanced diploma, Diagnostic Medical Sonography, Engineering, Massage Therapy, Medical Laboratory Science, Respiratory Therapy, Sport and Recreation Management.

Total courses: 15
At least 15 courses must be at the 200 level or above, and 4 of these must be at the 300 level or above. No more than eight courses may be taken in any one area.

Major requirements:
(a) three courses from Arts and Humanities;
(b) three courses from Social Sciences
(c) two courses from Business Administration
(d) two courses from Science, Engineering or Computer Science

Other requirements: five additional courses from any area of study.

Recommended options (if any):
Students are recommended to complete an e-portfolio and present it to the program coordinator or designate before they graduate.
The courses Ways of Knowing and Ways of Doing are designed to target College transfer students and distance education learners. Students should consider taking these courses so that they develop a sense of cohort.

Combined Honours in Social Justice

Social Justice Studies is a multi-disciplinary area of studies that enables students to gain insight into the unique and complex challenges facing societies throughout the world. In a world increasingly characterised by conflict, on a global and a national level, there is a need for individuals who can bring clarity of thought and depth of understanding to bear upon our most pressing social, economic and political problems. Students in this program will explore the roots of inequalities and will evaluate different strategies to bring about social change.

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses.
Example: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty

Major requirements: 12 courses in Social Justice, including:
(a) 38-101; 38-321; 38-447; 34-323, 48-375; and 54-100;
(b) a minimum of one in at least three of the following categories:

(i) 07-235, 24-378, 26-354, 26-358, 26-128, 40-225, 40-362, 40-370
(ii) 27-385, 34-227, 53-320
(iii) 40-257, 54-200, 43-349, 45-238, 45-249, 48-226, 53-260
(iv) 34-236, 43-251/53-200, 43-362, 45-211, 45-241, 46-240, 53-410, 46-440, 46-445, 95-405
(v) 24-471, 46-334, 47-117, 47-210

Major requirements-Other Subject: as prescribed by that area of study.

Other requirements:
(a) 01-150, 01-151;
(b) two courses from Arts or Languages;
(c) two courses from Science;
(d) additional courses from any area of study excluding Social Sciences, to a total of forty.

RECOMMENDED COURSE SEQUENCE

Year 1: 01-150, 01-151, and five courses, including: 38-101, 54-100, and three of 07-235, 26-128, 40-225, 40-257, 34-227, 34-236, 54-200, 48-226, 53-260, 43-251/53-200, 45-211, 45-241, 46-240.

Year 2: Five courses from the following list: 95-405, 24-471, 46-334, 47-210, 47-204, 99-200, 99-218.

Year 3: Four or Five courses, including: 38-321; and three or four of 34-323, 48-375, 24-378, 26-354, 26-358, 40-362, 40-370, 27-390, 53-320, 43-349, or 43-362.

Year 4: 38-447; 46-445 (optional) and 53-410 (optional).

*NB: Students are responsible for ensuring that they have the required pre-requisites for enrolment in the above list of courses.

Discovery Program (undeclared majors)

Students who have not decided on a major may remain undeclared until they have completed ten courses at the University of Windsor. These students will be placed in the Discovery Program.

The Discovery Program provides for undeclared students a home in their first year at university while they are discovering their preferred major. The “Effective Writing” courses required in this program will give them a solid foundation for the extensive amount of written work they face in courses they take throughout their university career. “Understanding the Contemporary World” will guide them into thinking critically while examining a variety of topics from several points of view. Students will receive attention to help them achieve academic success and the possibility for success after graduation.

Students in the Discovery Program (undeclared majors) must take 01-120 Understanding the Contemporary World and 01-150 Effective Writing in the Fall

Semester of their first year, and 01-151 Effective Writing II in the subsequent semester. Further academic counselling about choice of courses and other academic possibilities is available for students in this program through the Advising Centre.

Minor in Latin American Studies

*Required:*six courses, including two of 23-261, 43-272; two of 43-462, 48-226, 48-227, 48-352 (or 48-352), 48-411 (or 48-411); and 23-100 and 23-101 (or 23-102) or two intermediate or advanced level courses in Spanish language training (as appropriate, as determined by a placement test).

Minor in Social Justice

Total courses: 6

Program requirements: 38-101 and 38-321, plus any 4 courses listed under the Social Justice Honours Degree as follows: 07-235, 24-378, 24-471, 26-128, 26-354, 26-358, 27-285, 34-227, 34-236, 34-323, 38-447, 40-225, 40-257, 40-362, 40-370, 43-251/53 -200, 43-349, 43-369, 45-211, 45-241, 46-240, 46-334, 46-440, 46-445, 47-117, 47-210, 48-226, 48-375, 53-260, 53-320, 53-410, 54-100, 54-200, 95-405.

*NB: Students are responsible for ensuring that they have the required pre-requisites for enrolment in the above list of courses.

Certificate in Arts Management

Total courses: ten.

Requirements:
(a) 75-100, 70-151,74-231;
(b) 24-275 and 24-276, plus two of 27-380, 40-398, 40-399;
(c) one of 24-210, 26-100, 26-302, 40-225, 40-250, 40-381;
(d) two of 24-100, 24-111, 24-200, 24-225, 24-235, 24-325, 24-330, 24-333, 24-351, 24-352, 24-439, 27-385, 27-491, 28-245, 28-345, 32-107, 32-116, 32-126, 32-127, 32-346, 32-420, one course from private instruction in Music 33-247 to 33-269 or two of the 1.50 credit hour courses 33-210, 33-220, 33-260, 33-310.

FAHSS: GENERAL INFORMATION ABOUT HONOURS AND GENERAL PROGRAMS
ARTS, HUMANITIES AND SOCIAL SCIENCES: GENERAL COURSES
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POLITICAL SCIENCE

PROGRAMS
General Political Science
Honours Political Science
Honours Political Science with Bilingual Specialization
Honours Political Science with Law and Politics Specialization
Honours International Relations and Development Studies
Political Science Combined Honours Programs
Combined Honours Digital Journalism and Political Science *(Housed in Inter-faculty programs)*

DEGREE COMPLETION PROGRAMS
General Political Science for Hebei Law and Politics College Graduates
Honours Political Science for Hebei Law and Politics College Graduates

Certificate in Public Administration
Certificate in Law and Politics
Certificate in North American Studies

Minor in Political Science

Major and Minor Concentrations - Bachelor of Arts and Science

Additional Information: GENERAL UNDERGRADUATE REGULATIONS

General Political Science

Total courses: thirty.

Major requirements [twelve courses]:
(a) 45-100, 45-130 and 45-160;
(b) nine additional courses, including at least three at the 300-level or above.
(Note: students interested in switching to Honours Political Science should take 02-250, 45-275, and one of 45-251 or 45-252)

Option requirements [six courses]:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements [twelve courses]:
(a) 01-150, 01-151;
(b) five courses from any area of study, including Political Science;
(c) five courses from any area of study, excluding Political Science.

Subfields (students are strongly encouraged to take at least one course from each subfield)

Canadian Politics
200-level: 45-201, 45-211, 45-213, 45-264
300-level: 45-309, 45-320, 45-323, 45-326
400-level: 45-411, 45-412

Comparative Politics
200-level: 45-232, 45-233, 45-238, 45-241, 45-244
300-level: 45-338, 45-346, 45-365, 45-367, 45-370
400-level: 45-431, 45-434

International Relations and Development Studies
100-level: 45-170
200-level: 45-249, 45-267, 45-268
300-level: 45-354, 45-355, 45-356, 45-360, 45-363
400-level: 45-461, 45-462, 45-464, 45-465, 45-470

Political Theory, Culture and Religion
200-level: 45-251, 45-252, 45-260, 45-261
300-level: 45-351, 45-371, 45-372, 45-373, 45-378, 45-379

400-level: 45-451

Public Administration, Law and Policy
200-level: 45-212, 45-214, 45-220, 45-221
300-level: 45-314, 45-321, 45-324, 45-361, 45-399
400-level: 45-421, 45-422, 45-492 and 45-493 (taken concurrently)

Honours Political Science

Total courses: forty.

Major requirements [nineteen courses]:
(a) 45-100, 45-130, 45-160 and 45-275;
(b) one of 45-251 or 45-252 [should be taken in Semester 3, 4 or 5]
(c) fourteen additional courses, including at least two at the 300-level and three at the 400-level.

Option requirements [six courses]:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements [fifteen courses]:
(a) 01-150, 01-151, 02-250;
(b) six courses from any area of study, including Political Science;
(c) six courses from any area of study, excluding Political Science.

Subfields (students are strongly encouraged to take at least one course from each subfield)

Canadian Politics
200-level: 45-201, 45-211, 45-213, 45-264
300-level: 45-309, 45-320, 45-323, 45-326
400-level: 45-411, 45-412

Comparative Politics
200-level: 45-232, 45-233, 45-238, 45-241, 45-244
300-level: 45-338, 45-346, 45-365, 45-367, 45-370
400-level: 45-431, 45-434

International Relations and Development Studies
100-level: 45-170
200-level: 45-249, 45-267, 45-268
300-level: 45-354, 45-355, 45-356, 45-360, 45-363
400-level: 45-461, 45-462, 45-464, 45-465, 45-470

Political Theory, Culture and Religion
200-level: 45-251, 45-252, 45-260, 45-261
300-level: 45-351, 45-371, 45-372, 45-373, 45-378, 45-379
400-level: 45-451

Public Administration, Law and Policy
200-level: 45-212, 45-214, 45-220, 45-221
300-level: 45-314, 45-321, 45-324, 45-361, 45-399
400-level: 45-421, 45-422, 45-492 and 45-493 (taken concurrently)

Honours Political Science with Bilingual Specialization

Total courses: forty.

Major requirements—University of Windsor [14 courses]:
(a) 45-100, 45-130, 45-160 and 45-275;
(b) 45-205. Contemporary Canadian Political Issues [French];
(c) 45-203. Quebec Politics and Society [French];
(d) 45-204. Issues in Quebec Politics [French];
(e) one of 45-251 or 45-252 [to be taken in Semester 3, 4 or 5];
(f) six additional courses, including at least two at the 300-level and three at the 400-level.

Major requirements—University of Ottawa [5 courses]:
(a) five of:

POL2507. Introduction à la pensée politique
POL3514. Vie politique en Asie

POL3525. Pouvoir municipal au Canada
POL3526. Les femmes et la politique
POL3533. Politique et medias
POL3540. Vie politique aux États-Unis
POL3542. Vie politique en Europe occidentale
POL3544. Vie politique en Afrique
Or other approved course at the 2000-level or above

Option requirements [6 courses]:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements [15 courses]:
(a) 01-150, 01-151, 02-250;
(b) 29-121, 29-122, 29-221, 29-222 and 29-270;
(c) one of 29-253, 29-260 or 29-283;
(d) three courses from any area of study, including Political Science;
(e) three courses from any area of study, excluding Political Science.

SUGGESTED PROGRAM SEQUENCING

Year 1 [Semester 1]
01-150. Effective Writing I
29-121. French Language Training I [French]
45-100. Introduction to Canadian Government and Politics
45-130. Comparative Politics or 45-160. World Politics
One 'Option requirement' course

Year 1 [Semester 2]
01-151. Effective Writing II
29-122. French Language Training II [French]
45-130. Comparative Politics or 45-160. World Politics
One 'Option requirement' course
One 'Option requirement' course

Year 2 [Semester 3]
02-250. Basic Quantitative Methods in the Social Sciences
29-221. French Language Training III [French]
45-205. Contemporary Canadian Political Issues [French]
45-203. Quebec Politics and Society [French]
One 'Option requirement' course

Year 2 [Semester 4]
45-275. Introduction to Research Methods
29-222. French Language Training IV [French]
45-XXX. Political Science course (Note: 45-251 or 45-252 should be taken in Sem. 3, 4 or 5)
45-204. Issues in Quebec Politics [French]
One 'Other requirement' course

Year 3 [Semester 5]
One of 29-253, 29-260 or 29-283 [French]
29-270. Intro to Cultural Heritage of French Canada [French]
45-XXX. Political Science course (Note: 45-251 or 45-252 should be taken in Sem. 3, 4 or 5)
One 'Option requirement' course
One 'Other requirement' course

Year 3 [Semester 6 –University of Ottawa]
Five of:

POL2507. Introduction à la pensée politique [French]
POL3514. Vie politique en Asie [French]
POL3525. Pouvoir municipal au Canada [French]
POL3526. Les femmes et la politique [French]
POL3533. Politique et medias [French]
POL3540. Vie politique aux États-Unis [French]
POL3542. Vie politique en Europe occidentale [French]
POL3544. Vie politique en Afrique [French]
Or other approved course at the 2000-level or above [French]

Year 4 [Semester 7]
45-XXX. Political Science elective [300-level]
45-XXX. Political Science elective [300-level]
One 'Option requirement' course
One 'Other requirement' course
One 'Other requirement' course

Year 4 [Semester 8]
45-XXX. Political Science elective [400-level]
45-XXX. Political Science elective [400-level]
45-XXX. Political Science elective [400-level]
One 'Other requirement' course
One 'Other requirement' course

Honours Political Science with Law and Politics Specialization

Total courses: forty.

Major requirements [20 courses]:
(a) 45-100, 45-130, 45-160 and 45-275;
(b) one of 45-251 or 45-252 [should be taken in Semester 3, 4 or 5];
(c) two of 45-214, 45-314, 45-321, and 45-363;
(d) three of 45-201, 45-212, 45-220, 45-221, 45-309, 45-323, 45-324, and 45-326;
(e) ten additional Political Science courses, including at least two at the 300-level and three at the 400-level.

Option requirements [6 courses]:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements [14 courses]:
(a) 01-150, 01-151, 02-250, 34-160, and 34-261;
(b) one of 01-209 or 34-221;
(c) two of 34-226, 43-287, 48-262, 53-310, and 54-200;
(d) three courses from any area of study, including Political Science;
(e) three courses from any area of study, excluding Political Science.

Recommended Course Sequencing

Year 1 [Semester 1]
01-150. Effective Writing I
45-100. Introduction to Canadian Government and Politics
45-130. Comparative Politics or 45-160. World Politics
One 'Option requirement' course
One 'Other requirement' course

Year 1 [Semester 2]
01-151. Effective Writing II
45-130. Comparative Politics or 45-160. World Politics
45-XXX. Political Science course
One 'Option requirement' course
One 'Other requirement' course

Year 2 [Semester 3]
02-250. Basic Quantitative Methods in the Social Sciences
45-XXX. Political Science course [Note: 45-251 or 45-252 should be taken in Sem. 3, 4 or 5]
45-XXX. Political Science course
34-160. Reasoning Skills
One 'Option requirement' course

Year 2 [Semester 4]
45-275. Introduction to Research Methods
45-XXX. Political Science course [Note: 45-251 or 45-252 should be taken in Sem. 3, 4 or 5]
45-XXX. Political Science course
34-261. Informal Logic: Argumentation [prerequisite: 34-160]
One 'Other requirement' course

Year 3 [Semester 5]
45-XXX. Political Science course [Note: 45-251 or 45-252 should be taken in Sem. 3, 4 or 5]
45-XXX. Political Science course

45-XXX. Political Science course
One 'Option requirement' course
One 'Other requirement' course

Year 3 [Semester 6]
45-XXX. Political Science course
45-XXX. Political Science course
One 'Option requirement' course
One 'Other requirement' course
One 'Other requirement' course

Year 4 [Semester 7]
45-3XX. Political Science course
45-3XX. Political Science course
One 'Option requirement' course
One 'Other requirement' course
One 'Other requirement' course

Year 4 [Semester 8]
45-4XX. Political Science course
45-4XX. Political Science course
45-4XX. Political Science course
One 'Other requirement' course
One 'Other requirement' course

Honours International Relations and Development Studies

General Information

Faculty teaching courses that fulfill the requirements for degree programs in International Relations are listed in the "Instructors" section for the areas of Political Science, Economics, History, Geography, Sociology, and Anthropology. The program in International Relations and Development Studies links courses in several areas of study in order to provide a broad understanding of the dynamics of global society and a useful preparation for a wide variety of careers relating to the international field. The program draws primarily upon the resources of Political Science, Economics, History, Sociology, and Anthropology. Beyond a common core of courses, students choose two concentrations. Experience has shown that this long-established and comprehensive program provides an excellent background for careers in diplomatic services, international institutions, internationally-oriented non-governmental organizations, journalism, banking, international business, teaching, and law. The Honours B.A. in International Relations and Development Studies is a challenging program. Students who persevere have found the rewards, especially in terms of future career prospects, to be worth the effort.

Total courses: forty

Major requirements: 16 courses, consisting of:
(a) 45-100, 45-160, 45-264, 45-275, 45-354 or 45-355, 45-360, 45-461, 45-462;
(b) 43-123, 43-124;
(c) One of 45-251, 45-252 or 45-351
(d) Three of 45-130, 45-120, 45-233, 45-241, 45-244, 45-249, 45-260, 45-261, 45-267, 45-268;
(e) Two of 45-346, 45-356, 45-361, 45-363, 45-365, 45-367, 45-371, 45-372, 45-373, 45-464, 45-465, 45-470

Other requirements:
(a) 02-250, 41-110, 41-111;
(b) 01-150, 01-151;
(c) 10 courses (11 if language concentration is chosen) consisting of two of the concentrations listed below.

<u>Students must complete the requirements in any two of the following concentrations:</u>
[Entry into some of the courses in these concentrations will require prerequisites, or in some cases instructor approval]
Please note that courses taken for one concentration or as part of the major requirements cannot be used in fulfilling the requirements for a different concentration.

Economics Concentration, consisting of five courses: 41-221, 41-231 and three of

41-310, 41-341, 41-350, 41-353, 41-373, 41-374, 45-355 (if not already taken as a major requirement);

History Concentration, consisting of five courses: five from 43-202, 43-210*, 43-211* 43-218, 43-221, 43-243, 43-244, 43-272, 43-321, 43-321, 43-420*, 43-462, 43-470

Sociology Concentration, consisting of five courses: 48-110, and four of 48-227, 48-327, 48-333, 48-339, 48-340, 48-352, 48-375 48-411

Gender Concentration, consisting of five courses: five from 53-106, 45-211, 53-260, 43-336, 48-204, 48-214, 48-215 (or 53-201), 48-306, 48-352, 48-353 (or 53-320), 48-354, 48-408, 53-340

Geography and Globalization Concentration, consisting of five courses: 45-120 and four of 28-450/40-450, 34-323, 45-335, 45-440, 45-465, 48-227, 48-375, and 53-260.

Middle Eastern and Islamic Studies Concentration, consisting of five courses: 45-235, 45-373, and three of 43-210, 43-211, 08-261, 08-262, 43-310, 45-365, 43-411, 43-414.

Language Concentration,** consisting of six courses, at least four of which are from the same language:

French (designed for students with Grade 12 “U” French): 29-121 and 29-122 or 29-123, 29-221 and 29-222 or 29-223, 29-260, 29-270.

German (designed for students with no background in German): 15-102, 15-202, 15-260, 15-261

Italian (designed for students with no background in Italian): 21-102, 21-202, 21-260, 21-261.

Spanish (designed for students with no background in Spanish): 23-102, 23-202, 23-260, 26-261.

Arabic (designed for students with no background in Arabic): 08-110, 08-111, 08-210, 08-211, 08-261, 08-262

d) Nine options (eight if a language concentration is chosen)

*These courses will count for one concentration only.

**A flexible approach will be taken to accommodate students with different levels of linguistic competence at point of entry into the program.

***Double credit, counts as two courses

Political Science Combined Honours Programs

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements - Political Science [fifteen courses]:
(a) 45-100, 45-130, 45-160, and 45-275;
(b) one of 45-251 or 45-252 [should be taken in Semester 3, 4 or 5]
(c) ten additional courses, including at least three at the 400-level.

Major requirements - Other Area of Study [as prescribed by that area of study]

Option requirements [six courses]:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151, 02-250;
(b) additional courses from any area of study to a total of forty courses.

Subfields (students are strongly encouraged to take at least one course from each subfield)

Canadian Politics
200-level: 45-201, 45-211, 45-213, 45-264
300-level: 45-309, 45-320, 45-323, 45-326
400-level: 45-411, 45-412

Comparative Politics
200-level: 45-232, 45-233, 45-238, 45-241, 45-244
300-level: 45-338, 45-346, 45-365, 45-367, 45-370
400-level: 45-431, 45-434

International Relations and Development Studies
100-level: 45-170
200-level: 45-249, 45-267, 45-268
300-level: 45-354, 45-355, 45-356, 45-360, 45-363
400-level: 45-461, 45-462, 45-464, 45-465, 45-470

Political Theory, Culture and Religion
200-level: 45-251, 45-252, 45-260, 45-261
300-level: 45-351, 45-371, 45-372, 45-373, 45-378, 45-379
400-level: 45-451

Public Administration, Law and Policy
200-level: 45-212, 45-214, 45-220, 45-221
300-level: 45-314, 45-321, 45-324, 45-361, 45-399
400-level: 45-421, 45-422, 45-492 and 45-493 (taken concurrently)

General Political Science for Hebei Law and Politics College Graduates - Degree Completion Program

Admission Requirements

(a) Academic standard
Students shall complete the respective courses and earn the required credits at HPLC according to each specific program. Students with grade point average of 80% are eligible to be admitted to the University of Windsor Political Science program.
(b) Language skills
Students must provide certificate evidencing proficiency in English by one of the options below:
- TOEFL: a minimum of 560 on paper based, or 83 iBT with 20 for writing, 220 computer-based test with a T.W.E. 4.5 on the computer-based test
- IELTS: a minimum of 6.5 for undergraduate programs
- ELIP: 75% in level 3 in English Language Improvement Program administered by University of Windsor

Program Requirements

Total courses: 20 courses

Major requirements [ten courses]:
(a) 45-100, 45-130 and 45-160;
(b) seven additional courses, including at least three at the 300-level or above.
(Note: students interested in switching to Honours Political Science should take 02-250, 45-275, and one of 45-251 or 45-252)

Other requirements [six courses]:
(a) 01-150, 01-151;
(b) two courses from any area of study, including Political Science;
(c) two courses from any area of study, excluding Political Science.

Option requirements [four courses]:
(a) one courses from Arts;
(b) one courses from Languages or Science;

(c) two courses from any area of study, excluding Social Sciences.

Recommended Course Sequencing

First Semester
01-150
02-45-100
02-45-130
One other requirement
One option requirement

Second Semester
01-151
02-45-160
One major requirement
One option requirement
One other requirement

Third Semester
Three major requirements
One option requirement
One other requirement

Fourth Semester
Three major requirements
One option requirement
One other requirement

Honours Political Science for Hebei Law and Politics College Graduates - Degree Completion Program

Total courses: 30 courses

Major requirements [sixteen courses]:
(a) 45-100, 45-130, 45-160 and 45-275;
(b) one of 45-251 or 45-252 [should be taken in Semester 3, 4 or 5]
(c) eleven additional courses, including at least two at the 300-level and three at the 400-level.

Other requirements [eight courses]:(a) 01-150, 01-151;
(b) three courses from any area of study, including Political Science;
(c) three courses from any area of study, excluding Political Science.

Option requirements [six courses]:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Recommended Course Sequencing

First Semester
01-150
02-45-100
02-45-130
One other requirement
One option requirement

Second Semester
01-151
02-45-160
One major requirement
One other requirement
One option requirement

Third Semester
02-45-275
One major requirement
Two other requirements
One option requirement

Fourth Semester
02-45-251 or 02-45-252
Two major requirements

One other requirement
One option requirement

Fifth Semester
One 400 level major requirement
Two major requirements
One other requirement
One option requirement

Sixth Semester
Two 400 level major requirements
Two major requirements
One option requirement

Certificate in Public Administration

Total courses: ten.

Requirements:
(a) 45-100, 45-220, 45-221:
(b) 41-110 and 41-111;
(c) five of 45-212; 45-213; 45-214; 45-232; 45-275; 45-309; 45-314; 45-321; 45-323; 45-326; 45-411; 45-421; 45-422

Certificate in Law and Politics

Total courses: Ten

Major requirements:
a) 45-100, 45-160, and 34-160 or 34-162
b) Two of 45-214 , 45-314, 45-363
c) Five of 26-100, 34-221, 34-226, 48-260, 48-262, 43-287, 53-310, 54-200, 54-318, 45-220, 45-221, 07-235, 07-236

Participation in careers counselling and community volunteer experience is strongly recommended.

Certificate in North American Studies

Total courses: ten

Requirements:
(a) 45-100, 45-232 , 45-238, 45-338, 45-355;
(b) Two of 45-264; 45-201; 45-361; 45-434; 45-465;
(c) Two of 43-243; 43-244; 43-247; 43-262; 43-349; 43-362; 43-363
(d) One of 48-228; 48-333; 48-339

Minor in Political Science

(a) 45-100;
(b) one of 45-130 or 45-160;
(c) four Political Science courses at the 200 level or above.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 12 courses including

Maximum of two 100-level courses in Political Science
(a)Must take either 45-251 or 45-252
(b)At least two 300-level courses in Political Science
(c)At least three 400-level course in Political Science

*Students are encouraged to take 45-100 and closely review prerequisites for other Political Science courses to ensure appropriate planning of their program of study.

Minor Concentration: 6 courses including,
(a) Maximum of two 100-level courses in Political Science
(b) Must take either 45-251 or 45-252
(c) At least one 300-level or 400-level course in Political Science

*Students are encouraged to take 45-100 and closely review prerequisites for other Political Science courses to ensure appropriate planning of their program of study.

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STATEMENT OF RESPONSIBILITY OF THE UNIVERSITY

1. The content of this Calendar is provided for the general guidance of the student and is not intended to make any contractual commitments therefor. The Calendar is accurate at the time of its publication, but programs, courses, staffing, etc. are subject to change from time to time as deemed appropriate by the University of Windsor in order to fulfill its role and mission, or to accommodate circumstances beyond its control. Any such changes may be implemented without prior notice and, unless specified otherwise, are effective when made. The official University of Windsor academic calendars are: the Undergraduate Web Calendar, the Graduate Web Calendar, and the Faculty of Law Calendar.

2. This Calendar represents the University of Windsor's best judgment and projection of the course of conduct of the University of Windsor during the periods addressed herein. It is subject to change due to forces beyond the University of Windsor's control or as deemed necessary by the University of Windsor in order to fulfill its educational objectives.

3. Advisors are provided to assist students in planning their academic programs. Advisors are not authorized to change established policy of the University of Windsor. Students are solely responsible for assuring that their academic programs comply with the policies of the University of Windsor. Any advice which is at variance with established policy must be confirmed by the appropriate Dean's Office.

4. Any tuition fees and/or other charges described herein are good faith projections for the academic year. They are, however, subject to change from one academic term to the next as deemed necessary by the University of Windsor in order to meet its financial commitments and to fulfill its role and mission.

5. There are other fees and charges which are attendant upon a student's matriculation at the University of Windsor. These fees or charges may be determined by contacting the University offices which administer the programs or activities in which the student intends to enroll or engage.

6. The University of Windsor reserves the right to terminate or modify program requirements, content, and the sequence of program offerings from term to term for educational reasons which it deems sufficient to warrant such actions.

Further, the University of Windsor reserves the right to terminate programs from term to term for financial or other reasons which it determines warrant such action. The content, schedule, requirements and means of presentation of courses may be changed at any time by the University of Windsor for educational reasons which it determines are sufficient to warrant such action. Programs, services, or other activities of the University of Windsor may be terminated at any time due to reasons beyond the control of the University of Windsor.

7. The course descriptions herein are based upon reasonable projections of faculty and faculty availability and appropriate curriculum considerations. The matters described are subject to change based upon changes in circumstances upon which these projections were based and as deemed necessary by the University of Windsor to fulfill its role and mission.

NOTIFICATION OF DISCLOSURE OF PERSONAL INFORMATION TO STATISTICS CANADA

Statistics Canada is the national statistical agency. As such, Statistics Canada carries out hundreds of surveys each year on a wide range of matters, including education.

It is essential to be able to follow students across time and institutions to understand, for example, the factors affecting enrollment demand at post-secondary institutions. The increased emphasis on accountability for public investment means that it is also important to understand ‘outcomes'. In order to carry out such studies, Statistics Canada asks all colleges and universities to provide data on students and graduates. Institutions collect and provide to Statistics Canada student identification information (student's name, student ID number, Social Insurance Number), student contact information (address and telephone number), student demographic characteristics, enrollment information, previous education, and labour force activity.

The Federal Statistics Act provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information from being released in any way that would identify a student.

Students who do not wish to have their information used are able to ask Statistics Canada to remove their identification and contact information from the national database.

Further information on the use of this information can be obtained from Statistics' Canada's web site: http://www.statcan.ca or by writing to the Postsecondary Section, Centre for Education Statistics, 17th Floor, R.H. Coats Building, Tunney's Pasture, Ottawa, K1A 0T6.

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INTER-FACULTY PROGRAMS

Arts and Sciences
Honours Bachelor of Interdisciplinary Arts and Science (BAS)
Honours Bachelor of Interdisciplinary Arts and Science (BAS) Double Major Concentration
Honours Bachelor of Interdisciplinary Arts and Science (BAS) Major and Double Minor Concentration
Major and Minor Concentrations

Anthrozoology
Minor in Anthrozoology

Education
Minor in Organizational Learning and Teaching
NOTE: The Organizational Learning and Teaching courses are offered by the Faculty of Education, through Inter-Faculty programs. Courses that lead to the Minor in Organizational Learning and Teaching can not be counted towards a Bachelor of Education.

Digital Journalism
Combined Honours Digital Journalism in English Language and Literature
Combined Honours Digital Journalism and English Literature and Creative Writing
Combined Honours Digital Journalism and Political Science
Combined Honours Digital Journalism and Communication, Media and Film

Environmental Studies
Environmental Studies

Forensics
Honours Bachelor of Forensic Science (BFS)
Combined Honours Bachelor of Arts in Forensics

Cross Border Institute
Certificate in Border Management and International Trade

Honours Bachelor of Interdisciplinary Arts and Science (BAS)

The Bachelor of Arts and Science program provides substantial education in the disciplines of both arts and sciences, and it puts an emphasis on critical thinking and argument. Throughout, students will take course designed to foster the skills of inquiry and, in the third and fourth years, they will take courses in the methods of inquiry and applied inquiry. In addition to developing students' research skills and involving them with topics of public concern, these courses develop their abilities and confidence as writers and speakers.

Total courses: forty.

Major requirements:

Core Courses
(a) 56-100, 34-162, 34-221, 62-130 (or 62-139 or 62-140 and 62-141 if major or minor concentration is Math, Physics or Biochemistry.), 65-205 or 02-250 (Science majors must take 65-205), 56-301, 56-310, 56-410, 56-420 (or other departmental requirement for the student's Major concentration), 56-421.
(b) One course from 11-161, 43-113, 43-114, 34-110, 45-251, 45-252, 07-202, 07-203, 07-220
(c) Four courses (any two of the following pairs): 41-110 and 111, 55-140 and 55-141, 59-140 and 59-141, 60-140 and 60-141, 61/66-140 and 61/66-141, 62-140 and 62-141, 64-140 and 64-141, 64-130 and 64-131.

Major Concentration (12)
(a) Maximum of two 100-level courses in the major subject
(b) At least four 300-level or 400-level courses in the major subject

Minor Concentration (6)
(a) Maximum of two 100-level courses in the minor subject

(b) At least one 300-level or 400-level course in the minor subject
(c) Any remaining courses to bring the total course number to 40 may be from any area of study.

Other requirements:
(a) At least 15 courses must be taken in each of the Faculty of Arts, Humanities and Social Sciences and the Faculty of Science.
(b) To continue in the program, and to receive the Honours BAS degree, students must maintain an Honours 70% cumulative average and major average.

When a requirement in the Major or Minor Concentration is taken as part of the core BAS program course requirements, another course must be selected from within the area of concentration and substituted with the approval of the Director of Inter-Faculty programs. Similarly, when a requirement in the Major Concentration is taken as part of the course requirements in the Minor Concentration, another course must be selected from within the area of Major Concentration and substituted with the approval of the Coordinator of Inter-Faculty programs.

BAS students who have successfully completed a thesis as part of their Major Concentration will have the *"with thesis"* designation added to their transcript and diploma.

Required courses for Major and Minor concentrations are listed in the relevant program section of the calendar.

PROGRAM SEQUENCING

Students must select a Major and a Minor Concentration at the start of Year 2. Consultation is available from the Director of the program. The selection of electives in Years 2, 3 and 4 must satisfy the requirements for the Major and the Minor concentrations, and the general program requirement that students must complete at least 15 courses in each of the two Faculties.

Year 1: 56-100, 34-162, 62-130 (or 62-140 and 62-141 if requirement for major or minor concentration), one of 11-161, 43-113, 43-114, 34-110, 45-251, 45-252, 07-203, 07-220, two courses selected as needed to satisfy major or minor requirements in Arts, Humanities, and Social Science, four courses consisting of any two of the following pairs: 55-140 and 55-141, 62-140 and 62-141, 59-140 and 59-141, 60-140 and 60-141, 66-140 and 66-141, 62-140 and 62-141, 64-130 and 64-131, 64-140 and 64-141, 41-110 and 41-111.

Year 2: 65-205 or 02-250; plus any nine additional courses, at least 2 from each of the Faculty of Arts, Humanities, and Social Sciences and the Faculty of Science, and consistent with satisfying the requirements for the Major and the Minor concentrations.

Year 3: 34-221, 56-310, 56-301; Plus any seven additional courses, at least 2 from each of the Faculty of Arts, Humanities, and Social Sciences and the Faculty of Science, and consistent with satisfying the requirements for the Major and the Minor concentrations.

Year 4: 56-421, 56-410, 56-420 (or other departmental requirement for the student's Major concentration); plus any seven additional courses as needed to satisfying the remaining requirements for the Major concentration, the Minor concentration and/or the Program.

Honours Bachelor of Interdisciplinary Arts and Science (BAS) Double Major Concentration

Major requirements:

Core Courses

> (a) 56-100,34-162, 34-221, 62-130 (or 62-139 or 62-140 and 62-141 if major or minor concentration is Math, Physics or Biochemistry), 65-205, 56-301, 56-310, 56-410, 56-420 (or other departmental requirement for the student's Major concentration), 56-421.
>
> (b) One course from 11-161, 43-113, 43-114, 34-110, 45-251, 45-252, 07-202, 07-203, 07-220
>
> (c) Four courses (any two of the following pairs): 41-110 and 111, 55-140 and 55-141, 59-140 and 59-141, 60-140 and 60-141, 61/66-140 and 61/66-141, 62-140 and 62-141, 64-140 and 64-141, 64-130 and 64-131.

Major Concentration I (12)
(a) Maximum of two 100-level courses in the major subject
(b) At least four 300-level or 400-level courses in the major subject

Major Concentration II (12)
(a) Maximum of two 100-level courses in the major subject
(b) At least four 300-level or 400-level courses in the major subject

Other requirements:
(a) At least 15 courses must be taken in each of the Faculty of Arts, Humanities, and Social Sciences and the Faculty of Science.
(b) To continue in the program, and to receive the Honours BAS degree, students must maintain an Honours 70% cumulative average and major average.
(c) Any remaining courses to bring the total course number to 40 may be from any area of study.

Honours Bachelor of Interdisciplinary Arts and Science (BAS) Major and Double Minor Concentration

Total courses: forty.

Major requirements:
Core Courses

> (a) 56-100, 34-162, 34-221, 62-130 (or 62-139 or 62-140 and 62-141 if major or minor concentration is Math, Physics or Biochemistry.), 65-205 or 02-250 (Science majors must take 65-205), 56-301, 56-310, 56-410, 56-420 (or other departmental requirement for the student's Major concentration), 56-421.
>
> (b) One course from 11-161, 43-113, 43-114, 34-110, 45-251, 45-252, 07-202, 07-203, 07-220
>
> (c) Four courses (any two of the following pairs): 41-110 and 111, 55-140 and 55-141, 59-140 and 59-141, 60-140 and 60-141, 61/66-140 and 61/66-141, 62-140 and 62-141, 64-140 and 64-141, 64-130 and 64-131.

Major Concentration (12)
(a) Maximum of two 100-level courses in the major subject
(b) At least four 300-level or 400-level courses in the major subject

Minor Concentration I (6)
(a) Maximum of two 100-level courses in the minor subject
(b) At least one 300-level or 400-level course in the minor subject

Minor Concentration II (6)
(a) Maximum of two 100-level courses in the minor subject
(b) At least one 300-level or 400-level course in the minor subject

Other requirements:
(a) At least 15 courses must be taken in each of the Faculty of Arts, Humanities, and Social Sciences and the Faculty of Science.
(b) To continue in the program, and to receive the Honours BAS degree, students must maintain an Honours 70% cumulative average and major average.
(c) Any remaining courses to bring the total course number to 40 may be from any area of study.

BAS - Major and Minor Concentrations
Faculty of Arts, Humanities and Social Sciences (FAHSS)
Anthropology
Classical Studies
Communication, Media and Film
Criminology
Dramatic Art
English Language, Literature and Creative Writing
French Studies

History
Languages, Literatures and Civilizations
Music
Philosophy
Political Science
Psychology
Sociology
Visual Arts
Women's Studies

Faculty of Science
Biochemistry
Biological Sciences
Chemistry
Computer Science
Earth and Environmental Sciences
Economics
Mathematics and Statistics
Physics

Minor in Anthrozoology

Total Courses: 6 courses
a) 51-160. Animals and Humans in Society
b) five of: 51-260, 51-261, 51-360, 34-329, 48-341, 51-200

Minor in Organizational Learning and Teaching

NOTE: The Organizational Learning and Teaching courses are offered by the Faculty of Education, through Interfaculty programs.
Courses that lead to the Minor in Organizational Learning and Teaching can not be counted towards a Bachelor of Education.

Total Courses: 6 courses
14-80-420 Theories of Individual and Collective Learning
14-80-410 Learning-Centred Teaching: Planning, Delivery, Assessment and Evaluation
14-80-415 Learning Organizations: Management and Leadership
14-80-405 Instructional Technology
14-80-400 Diversity and Inclusion in the Learning Organization
14-80-480 Experiential Learning Field Placement

ARTS AND SCIENCE: COURSES
CROSS BORDER MANAGEMENT AND INTERNATIONAL TRADE: COURSES
DIGITAL JOURNALISM: COURSES
ORGANIZATIONAL LEARNING AND TEACHING: COURSES
ENVIRONMENTAL STUDIES: COURSES
FORENSICS : COURSES
INTER-FACULTY (includes Anthrozoology): COURSES

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ODETTE SCHOOL OF BUSINESS

PROGRAMS
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Bachelor of Commerce (Honours Business Administration and Computer Science) Co-operative Education Program
Bachelor of Commerce (Honours Business Administration)
Bachelor of Commerce (Honours Business Administration and Economics)
Bachelor of Commerce (Honours Business Administration and Computer Science)
Certificate in Business Administration
Minor in Business Administration

DEGREE COMPLETION PROGRAMS
Bachelor of Commerce Program for University Graduates
Post Graduate Certificate in Accounting

Additional Information: Professional and Certificate Courses
Concentrations in Business *(Accounting, Human Resource, Finance, Operations and Information Systems Management, Marketing, Strategy and Entrepreneurship)*

GENERAL UNDERGRADUATE REGULATIONS

Bachelor of Commerce (Honours Business Administration) Co-operative Education Program
The Business Administration Co-op Program will help students acquire valuable professional experience in the workplace while they are pursuing their academic careers.

Students are admitted into the Bachelor of Commerce Co-op Program either directly out of their Grade 12 (or equivalent) Year, or in the Fall term of their second year of study in the Odette School of Business Administration. The Co-operative option is not available for the Honours Business and Economics or the Commerce for University Graduates program. Admission to the Program is competitive. Students applying from secondary school will be admitted based on academic achievement (typically, a minimum of 75% is required). Second-year students will complete a co-op application form and may be invited to an interview.

Students admitted to the Program must maintain a major average of 70% or better and a cumulative average of 65% or better, and must successfully complete three paid work terms to remain in the Co-op Program. To remain in the Co-op program only one outstanding failing grade (grade below 50%) is permitted.

Withdrawal from the co-op program will be granted on an exception basis only as

it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the 1st Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

The work/study sequence is as follows:

YEAR 1
Fall term: Study
Winter term: Study

YEAR 2
Fall term: Study
Winter term: Study
Summer term: Work

YEAR 3
Fall term: Study
Winter term: Work
Summer term: Study

YEAR 4
Fall term: Work
Winter term: Study
Summer term: Study

PROGRAM REQUIREMENTS

Total courses: forty*, plus three co-op work terms
**In addition to completing forty courses for the degree, students may be required to successfully complete the Odette School of Business' English Proficiency Test or successfully complete the follow-up communications workshops.*

Major Requirements – Business: 70-151, 70-255, 71-100, 71-240, 71-243, 71-300, 72-270, 72-271, 73-100, 73-202, 73-213, 73-220, 73-331, 74-131, 75-100, 75-397, 75-498; 75-205, 75-305, 75-405; eight additional business courses.

Other requirements: 41-110, 41-111, 62-194; six additional courses from outside of the Odette School of Business Administration; six courses from any area of study including Business.

Students wishing a stronger Mathematics background or wishing to concentrate in finance should take 62-140 in addition to 62-194. Students may opt to take 62-130 in place of 62-140 but are cautioned that 62-130 is not a prerequisite for upper-level Mathematics courses.

This program cannot be completed through Distance Education.

Work experience obtained with C.A. firms and other designated organizations will count toward work experience required for obtaining a C.A. designation. Students in the C.A. stream will be given credit for work experience earned since September 1, 1997 with an office approved for the training of C.A. students.

YEAR 1

First Term
41-110
62-194
75-100
Two courses from outside of Business Administration

Second Term
41-111
70-151
71-100
73-100
74-131

YEAR 2

First Term
70-255
71-240
72-270
73-202
One course from outside of Business Administration

Second Term
71-243
72-271
73-213
73-220
One course from within or outside of Business Administration

Third Term
75-205 Work term

YEAR 3

First Term
71-300
73-331
Three courses (Consult a faculty advisor).

Second Term
75-305 Work term

Third Term
75-397
Four courses. (Consult a faculty advisor).

YEAR 4

First Term
75-405 Work term

Second and Third Terms
75-498 and nine additional courses. (Consult a faculty advisor.)

Bachelor of Commerce (Honours Business Administration and Computer Science) Co-operative Education Program

The University of Windsor offers an interdisciplinary program leading to the degree of Bachelor of Commerce (Honours Business Administration and Computer Science). The objective of the program is to provide students with the knowledge, skills, and abilities to direct, co-ordinate, and manage information technology in

current business organizations.

Admission to this interdisciplinary program is from the Grade 12”U” or equivalent level only, to the University of Windsor, in consultation with representative(s) from the Faculty of Science, the Odette School of Business Administration, and the Centre for Career Education. OSS requirements include Grade 12”U” English, Advanced Functions and Introductory Calculus, Geometry and Discrete Mathematics, plus three other Grade 12 “U” credits, or their equivalents. An eighty percent average is recommended. At least sixty percent in all Grade 12”U” math (or equivalent) courses taken is required.

Students admitted to this program must complete a total of forty semester courses, must maintain a major average of 70% or better, a cumulative average of 65% or better, and successfully complete three work terms. Specific Co-op requirements are available through the Centre for Career Education.

This program cannot be completed through Distance Education.

Withdrawal from the co-op program will be granted on an exception basis only as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. The only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the first Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

The work/study sequence is as follows:

YEAR 1
Fall term: Study
Winter term: Study

YEAR 2
Fall term: Study
Winter term: Study
Summer term: Work

YEAR 3
Fall term: Study
Winter term: Work
Summer term: Study

YEAR 4
Fall term: Work
Winter term: Study
Summer term: Study

PROGRAM REQUIREMENTS

Total courses: forty* plus three co-op work terms
**In addition to completing forty courses for the degree, students may be required to successfully complete the Odette School of Business' English Proficiency Test or successfully complete the follow-up communications workshops.*

Major Requirements – Business: 70-151, 70-255, 71-100, 71-240, 71-243, 72-270, 72-271, 73-220, 73-331, 74-131, 75-100, 75-397, 75-498, 71-300; 75-205, 75-305, 75-405; plus seven business electives

Major requirements - Computer Science: 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-315, 60-330, 60-334, 60-367, plus three 300-level or above Computer Science courses.

Other requirements: 41-110, 41-111, 62-120, 62-140 (or 62-130), and 65-205.

Students who substitute 62-130 in place of 62-140 are cautioned that 62-130 is not a prerequisite for upper-level Mathematics courses.

RECOMMENDED COURSE SEQUENCE

YEAR 1

First Term
41-110
60-100
60-140
62-140
75-100

Second Term
41-111
60-141
65-205
70-151
71-100

YEAR 2

First Term
60-212
60-265
62-120
70-255
71-240

Second Term
60-254
60-256
71-243
73-220
74-131

Third Term
75-205 Work term

YEAR 3

First Term
60-315
60-330
72-270
73-331
One Computer Science course

Second Term
75-305 Work term

Third Term
60-334

60-367
72-271
75-397
One course from within Business Administration

YEAR 4

First Term
75-405 Work term

Second Term
71-300
Three Business courses
One Computer Science course

Third Term
75-498
Three Business courses
One Computer Science course

Bachelor of Commerce (Honours Business Administration)

The purpose of the Bachelor of Commerce program is to develop educated men and women with a grounding in business ideas and techniques which will help equip them for positions of responsibility in industry and commerce. The program is designed to provide the broad outlook needed in modern business, and accordingly stresses general procedures and methods of attack on problems. Students are guided toward independent study, and they are encouraged to grapple with business problems on their own. The objective is to give students an awareness of the position and significance of business in the world today.

Total courses: forty*.

**In addition to completing forty courses for the degree, students may be required to successfully complete the Odette School of Business' English Proficiency Test or successfully complete the follow-up communications workshops.*

Major Requirements – Business: 70-151, 70-255, 71-100, 71-240, 71-243, 72-270, 71-300, 72-271, 73-100, 73-202, 73-213, 73-220, 73-331, 74-131, 75-100, 75-397, 75-498; eight additional business courses

Other requirements: 41-110, 41-111, 62-194; six additional courses from outside of the Odette School of Business Administration; six courses from any area of study including Business.

Students wishing a stronger Mathematics background or wishing to concentrate in finance should take 62-140 in addition to 62-194. Students may opt to take 62-130 in place of 62-140 but are cautioned that 62-130 is not a prerequisite for upper-level Mathematics courses.

This program cannot be completed through Distance Education.

YEAR 1

First Term
41-110
62-194
75-100
Two courses from outside of Business Administration

Second Term
41-111
70-151
71-100
73-100
74-131

YEAR 2

First Term

71-240
70-255
72-270
73-202
One course from outside of Business Administration

Second Term
71-243
72-271
73-213
73-220
One course from within or outside of Business Administration

YEAR 3

First Term
71-300
73-331
Three courses (Consult a faculty advisor).

Second Term
75-397
Four courses. (Consult a faculty advisor).

YEAR 4

First and Second Terms
75-498 and nine additional courses. (Consult a faculty advisor.)

Bachelor of Commerce (Honours Business Administration and Economics)

The University of Windsor offers an Interdisciplinary Program leading to the Bachelor of Commerce (Honours Business Administration and Economics). The objective of the program is to prepare students for the growing demand for graduates trained in Business with a strong Economics background.

The program combines both the core of the Bachelor of Commerce program and the core of the Bachelor of Arts Economics program while allowing the student to use the options to gain additional training in Economics.

PROGRAM REQUIREMENTS

*Total courses:*forty*

**In addition to completing forty courses for the degree, students may be required to successfully complete the Odette School of Business' English Proficiency Test or successfully complete the follow-up communications workshops.*

Major Requirements – Business: 70-151, 70-255, 71-100, 71-240, 71-243, 71-300, 72-270, 72-271, 73-100, 73-213, 73-220, 73-331, 74-131, 75-100, 75-397, 75-498,plus seven additional business courses.

Major Requirements – Economics: 41-110, 41-111, 41-212 (or 65-251), 41-221, 41-222, 41-231 and 41-232; plus six additional economics courses, at least 4 or which have to be at the 300 level or above.

Other Requirements: 62-194 and 73-202 or 65-205 (or 65-250) and two courses from outside of business or economics.

Students wishing a stronger Mathematics background or wishing to concentrate in finance should take 62-140 in addition to 62-194. Students may opt to take 62-130 in place of 62-140 but are cautioned that 62-130 is not a prerequisite for upper-level Mathematics courses.

This program cannot be completed through Distance Education.

RECOMMENDED SEQUENCE

Students who desire to concentrate their studies in a particular area may need to modify this recommended sequence. These students should consult a faculty member in that area for an optimal sequence of courses.

YEAR 1

First Term
41-110
62-194
75-100
Two courses from outside of Business Administration or Economics

Second Term
41-111
73-100
70-151
71-100
74-131

YEAR 2

First Term
41-221
41-231
65-205 (or 73-202 or 65-250)
70-255
72-270

Second Term
41-212
41-222
72-271
73-213
73-220

YEAR 3

First Term
41-232
71-240
71-243
73-331
One additional Business course

Second Term
71-300
75-397
One additional Business course~~s~~
Two Economics courses

YEAR 4

First Term
Two Economics courses
Three Business courses

Second Term
75-498
Two Business courses
Two Economics courses

Notes:
1) Non-required courses taken in the Odette School of Business Administration should be chosen in consultation with the appropriate Area Chairperson and will lead to some specialization in the fields of P-IR, Finance and Marketing.

2) Non-required courses taken in Economics should likewise be chosen in consultation with an advisor.

3) In either case, all non-required courses in Business and Economics must be chosen from 300- or 400-level courses

4) Also, credit may not be obtained for both of 71-344 and 41-353.

5) Students who wish to accelerate their programs by taking courses in Summer must seek academic advising in the appropriate area.

Bachelor of Commerce (Honours Business Administration and Computer Science)

The University of Windsor offers an interdisciplinary program leading to the degree of Bachelor of Commerce (Honours Business Administration and Computer Science). The objective of the program is to provide students with the knowledge, skills, and abilities to direct, coordinate, and manage information technology in current business organizations.

PROGRAM REQUIREMENTS

Total courses: forty*

**In addition to completing forty courses for the degree, students may be required to successfully complete the Odette School of Business' English Proficiency Test or successfully complete the follow-up communications workshops.*

Major Requirements – Business: 70-151, 70-255, 71-100, 71-240, 71-243, 71-300, 72-270, 72-271, 73-220, 73-331, 74-131, 75-100, 75-397, 75-498; plus seven business electives.

Major requirements - Computer Science: 60-100, 60-140, 60-141, 60-212, 60-254, 60-256, 60-265, 60-315, 60-330, 60-334, 60-367, plus three 300-level or above Computer Science courses.

Other requirements: 41-110, 41-111, 62-120, 62-140 (or 62-130), and 65-205.

Students who substitute 62-130 in place of 62-140 are cautioned that 62-130 is not a prerequisite for upper-level Mathematics courses.

This program cannot be completed through Distance Education.

RECOMMENDED COURSE SEQUENCE

YEAR 1

First Term
41-110
60-100
60-140
62-140
75-100

Second Term
41-111
60-141
65-205
70-151
71-100

YEAR 2

First Term
60-212
60-265
62-120
70-255
71-240

Second Term
60-254
60-256
71-243
73-220
74-131

YEAR 3

First Term
60-315
60-330
72-270
73-331
One Computer Science course

Second Term
60-334
60-367
72-271
75-397
One course from within Business Administration

YEAR 4

First Term
71-300
Three Business courses
One Computer Science course

Second Term
75-498
Three Business courses
One Computer Science course

Certificate in Business Administration

This program is intended for part-time students. Courses are regular University credit courses and may be applied toward the Bachelor of Commerce degree.

Required courses:70-151, 70-255, 71-240, 72-270, 74-131, 75-100, plus 4 additional business courses.*

To be eligible to receive the Certificate in Business, a student must obtain a cumulative average of 60% or better.

In the event that an applicant has completed equivalent courses elsewhere, other courses may be substituted by the applicant with the consent of the Dean of the Odette School of Business Administration.

* NB: The Certificate in Business Administration is open to any student. Please note however that students must obtain the required prerequisite courses such as math and economics for some for the courses within the Certificate.

This program cannot be completed through Distance Education

Minor in Business Administration

The Minor shall consist of: 70-151, 70-255, 71-240, 72-270, 74-131, 75-100. Students must obtain a minimum average grade of 60% in the courses applied to the Minor and a minimum grade of 60% in each business course applied to the minor.

* NB: The Minor in Business will be open to any undergraduate student. Please note however that students must obtain the required prerequisite courses such as math and economics for some of the courses within the Minor. This program cannot be completed through Distance Education.

DEGREE COMPLETION PROGRAMS FOR UNIVERSITY GRADUATES

Bachelor of Commerce Program for University Graduates

Students may obtain the degree of Bachelor of Commerce following a baccalaureate degree previously completed with a cumulative average of 67% or better in an area other than Business Administration. *Normally this average will be calculated based on the grades achieved in the last 20 courses of that degree.*

Advanced standing may be granted to a maximum of four 100 or 200 level Business Administration courses provided that such courses were passed with a minimum grade of 60% and are beyond the student's initial degree requirements. If the courses were part of the initial degree, the student must substitute for such courses by taking additional Business courses.

Applicants to the Bachelor of Commerce Program for University Graduates must have completed at least one university-level mathematics course prior to entry into the program. Applicants who do not present a university mathematics course will be required to take 62-194 (mathematics for Business) as indicated in the Recommended Sequence for this program. Applicants who do not possess a Grade 12“U” or equivalent mathematics course prior to entry to this program will be required to complete a Grade 12“U” mathematics course, or its equivalent, prior to graduation from the program.

Students with degrees from universities outside Canada may be required to complete additional courses.

Total courses: twenty-four courses

Major requirements: 70-151, 70-255, 71-100, 71-240, 71-243, 71-300, 72-270, 72-271, 73-100, 73-202, 73-213, 73-220, 73-331, 74-131, 75-100, 75-397 and 75-498; plus four additional business courses.

Other requirements: 41-110, 41-111, and 62-194. (Students who have not previously completed these requirements prior to entry into the program, should do so as early as possible to meet the prerequisites for various business courses.)

This program cannot be completed through Distance Education.

RECOMMENDED SEQUENCE

First Term
41-110
62-194
71-100
75-100
73-100

Second Term
41-111
70-151
71-243
74-131
73-202

Third Term
70-255
71-240
72-270
73-213
73-220

Fourth Term
71-300
72-271
73-331
75-397
One other Business courses

Fifth Term
75-498
Three other Business courses. (Consult a faculty advisor).

Notes:
1)For the purpose of the above recommended sequence, Intersession and Summer Session are treated as one term.2)The maximum load for students in this program is six courses in each of the Fall and Winter terms and five courses over both Intersession and Summer Session.

Post Graduate Certificate in Accounting

Admission Requirements: Students entering the program must hold a university degree in any discipline, including Business, and must have obtained a cumulative average of 67% in the prior university degree. *Normally this average will be calculated based on the grades achieved in the last 20 courses of that degree.*

Total courses: Twelve

*Major requirements:*41-110, 62-194, 70-151, 70-251, 70-252, 70-255, 72-271, 70-352, 70-356, 70-360, 70-361 and 70-457.

*With permission of the Odette School of Business, students will be allowed to substitute another third or fourth year accounting course for any of the specified required accounting courses.

Other requirements: Due to course prerequisites, students must have completed 72-270 Business Finance I and any university-level Statistics course (such as 73-202 Business Data Analysis) before taking 72-271 Business Finance II.

Note: A student who has previously completed the following course(s) or their equivalents, will be exempted from taking the corresponding courses, and will not be required to substitute for the exempted course(s). The courses are:

41-110 Introduction to Economics I
62-194 Mathematics for Business
70-151 Principles of Financial Accounting
70-255 Principles of Managerial Accounting
72-271 Business Finance II

Concentrations in Business

Eligible business students may elect to concentrate in one of six areas of business. To be accepted into a concentration, a student must have achieved a certain grade in that concentration's gate-in course(s). To successfully obtain the concentration, a student must successfully complete all the requirements for the Bachelor of Commerce degree and must achieve a certain average grade for courses in the concentration and a certain grade in the concentration's cap-stone course. Although concentrations will not be formally recognized on transcripts or degrees, the Odette School of Business will provide students with documentation indicating that they have successfully obtained their particular concentration. Students who have selected a concentration will normally be given course registration priority in their area.

Note: Students registered in the Bachelor of Commerce for University Graduates program will be able to complete a concentration only by taking additional courses beyond those required for their degree. Depending upon the concentration, students registered in the Honours Business Administration and Computer Science (co-op and non co-op) or the Honours Business Administration and Economics programs may not be able to complete a concentration without taking additional courses beyond those required for their degree.

Students who wish to concentrate in **Accounting**, must fulfill the following requirements:

Number of courses (excluding gate-in courses): 8
Gate-in courses: 70-151 and 70-255 with a minimum grade of 65% in each course
Courses in concentration (including capstone course): 70-251, 70-252, 70-352, 70-356, 70-358, 70-360, 70-361 and 70-457 with a minimum average grade of 67%
Capstone course: 70-457 with a minimum grade of 70%

Students who wish to concentrate in **Human Resources**, must fulfill the following requirements:

Number of courses (excluding gate-in course): 9
Gate-in course: 71-243 with a minimum grade of 65%

Courses in concentration (including capstone course): 71-342, 71-344, 71-441, 71-451, 71-452, 71-485 plus any 3 of 71-383, 71-445, 71-448, 71-449, 71-481 and 71-491 with a minimum average grade of 70%
Capstone course: 71-485 with a minimum grade of 70%

Students who wish to concentrate in **Finance**, must fulfill the following requirements:

Number of courses (excluding gate-in course): 6
Gate-in course: 72-271 with a minimum grade of 65%
Courses in concentration (including capstone course): 72-474 and any 5* of 72-371, 72-372, 72-373, 72-378, 72-379, 72-472, 72-477, 72-478 and 72-491 with a minimum average grade of 67%
Capstone course: 72-474 with a minimum grade of 67%

**Students who successfully complete the CSC exam (1 & 2) will be able to substitute this completion for one of the 5 elective concentration courses. Students who successfully complete the CFA Level 1 exam will be able to substitute this completion for 2 of the 5 elective concentration courses. The substitutions above only apply toward the finance concentration and do not apply in any way toward their Bachelor of Commerce degree requirements. It is the student's responsibility to bring forward the appropriate documentation in a timely manner in order to receive the above noted substitutions.*

Students who wish to concentrate in **Operations and Information Systems Management**, must fulfill the following requirements:

Number of courses (excluding gate-in course): 8
Gate-in course: 73-220 with a minimum grade of 65%
Courses in concentration (including capstone course): 73-305, 73-311, 73-320, 73-411, 73-420, 73-431, 73-498 and 74-339 with a minimum average grade of 67%
Capstone course: 73-498 with a minimum grade of 67%

Students who wish to concentrate in **Marketing**, must fulfill the following requirements:

Number of courses (excluding gate-in course): 7
Gate-in courses: 74-131 (or 74-231) and 74-232 with a minimum grade of 65% in each course
Courses in concentration (including capstone course): 74-332, 74-439 and any 5 of 74-234, 74-335, 74-337, 74-338, 74-339, 74-432, 74-433, 74-435, 74-436, 74-437, 74-438 and 74-491 with a minimum average grade of 67%
Capstone course: 74-439 with a minimum grade of 67%

Students who wish to concentrate in **Strategy and Entrepreneurship**, must fulfill the following requirements:

Number of courses (excluding gate-in course): 6
Gate-in courses: 75-100 and 75-290 with a minimum grade of 67% in each course
Courses in concentration (including capstone course): : 75-3xx (Entrepreneurial Resource Management), 75-391, 71-445, 74-432, 75-490 and 1 of 75-493, 75-495 and 75-496 with a minimum average grade of 67%
Capstone course: one of 75-493, 75-495 and 75-496 with a minimum grade of 70%

Note: Where an area permits, a student may be able to substitute a Special Topics Course (7x-491) for one of the courses in the concentration (excluding the gate-in and capstone courses) with the approval of the Area Chair.

BUSINESS: COURSES

Fall 2015 Undergraduate Calendar

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Main University Secretariat

FACULTY OF EDUCATION AND ACADEMIC DEVELOPMENT

PROGRAMS
Consecutive Bachelor of Education (2-year program)

As of Fall 2014, there are no new admissions to the following programs:
Concurrent Bachelor of Arts in French Studies (Honours)/Bachelor of Education
Concurrent Bachelor of Mathematics (Honours) /Bachelor of Education
Concurrent Bachelor of Science (Honours) Chemistry (with thesis)/Bachelor of Education
Concurrent Bachelor of Science (Honours) Chemistry/Bachelor of Education
Concurrent Bachelor of Science (Honours) Biological Sciences/Bachelor of Education
Concurrent Bachelor of Science (Honours) Biological Sciences(with thesis)/Bachelor of Education
Concurrent Bachelor of Computer Science (Honours)/Bachelor of Education
Bachelor of Education/Diploma in Technological Education
Concurrent Bachelor of Arts/ Bachelor of Education/Diploma in Early Childhood Education

As of Fall 2013, there are no new admissions to this program:
Joint Bachelor of Education/Early Childhood Education Diploma (BEd/ECE)

Additional Information: Education General Information and Program Regulations
GENERAL UNDERGRADUATE REGULATIONS

Consecutive Bachelor of Education (2 year program)

APPLICATION

Candidates wishing to enter the two-year, pre-service program of study must apply through the Ontario Universities' Application Centre using the on-line application form (www.ouac.on.ca/teas/).

Applications must be received by the Centre by the announced date.

Applicants select one of three possible levels of teaching specialization: Primary-Junior (Junior Kindergarten to Grade 6), Junior-Intermediate (Grades 4 to 10), and Intermediate-Senior (Grades 7 to 12). Pertinent theory and exemplary teaching practices are supplemented by directed observation and field experience.

SELECTION OF CANDIDATES
Candidates will be selected for admission to the Pre-Service program on the basis of superior academic qualifications and experience profiles.

The Faculty of Education and Academic Development also offers an Equity Admissions Program.

ADMISSION REQUIREMENTS
1) A candidate for admission to the two-year, pre-service program of study leading to the Bachelor of Education (General) Degree and the Ontario Certificate of Qualification must submit proof of graduation with an approved degree from an accredited university. The candidate's university degree program must include at least ninety academic credits or equivalent beyond the Ontario Secondary Diploma (or equivalent.)

2) A candidate who wishes to qualify for the Ontario Certificate of Qualification, Intermediate-Senior concentration, will be required to select two teachable subjects from the following: Business Studies - General, Biology, Chemistry, Dramatic Arts, English, French as a Second Language, Geography, History, Mathematics, Music-Instrumental, Music-Vocal, Physical and Health Education, Physics, Science (General), Social Sciences General, and Visual Arts.

Junior-Intermediate candidates will be required to select one teachable subject

from the same list, excluding Biology, Chemistry, Physics and Social Sciences-General.

A candidate for the Intermediate-Senior level must have as prerequisites for the major teachable subject at least ten semester courses or equivalent (thirty credits) and for the second teachable subject at least six semester courses or equivalent (eighteen credits). Prerequisites for the Social Sciences General include courses in Anthropology, Political Science, Psychology, Women's Studies and/or Sociology. Candidates for the Junior-Intermediate area should have as prerequisites for their teachable subject at least six semester courses or equivalent (eighteen credits). Additional requirements apply for Music and French as a Second Language teachable subjects. Please see the Faculty of Education and Academic Development website.

3) *The following are required of all accepted applicants:*

(a) completed application form with the documents noted on form;
(b) birth certificate and Social Insurance Number (S.I.N.);
(c) proof of Canadian Citizenship or permanent residency as defined by the Immigration Act (Canada), or of eligibility for employment in Canada (if the Ontario Certificate of Qualification or a Temporary Letter of Standing is to be awarded);
(d) legal proof of change of name must be submitted where the name being used differs from that shown on the birth certificate.

4) *Additional requirements:*

(a) Prior to September 15, the candidate must present proof of a tuberculin test as required by the Ontario Ministry of Health. The test must have been administered during the previous twelve months.
(b) An official police criminal record check. The check must have been obtained within the previous six months.
(c) After acceptance, students are required to submit to the Faculty a recent photograph (passport-size) for identification purposes within the Faculty of Education and Academic Development.
(d) Candidates are advised that they are responsible for their own transportation to and from field placements.

STANDING REQUIRED FOR CONTINUATION

Faculty Courses:
Teacher Candidates, who obtain three or more final grades below a 60-62.9% in any course in the program, or one or more final grades of 0-49.9% in any course in the program, over the duration of the program, will have failed the Bachelor of Education (BEd) Degree and will not be eligible for recommendation to the Ontario College of Teachers for certification. In all such cases, upon a cumulative academic record as defined above, Teacher Candidates will be required to meet with the Associate Dean Pre-Service immediately to review their academic standing, which may lead to the requirement to withdraw from the program. Teacher Candidates may be provided with an opportunity to return to the Faculty of Education to fulfill outstanding requirements for the completion of the BEd Degree. Conditions of reinstatement are the sole prerogative of the Dean or her/his designate.

Practicum:
Each teacher candidate receives a final Pass/Fail grade for Practice Teaching (80-499). A pass is an essential prerequisite for both the BEd degree and recommendation for certification to the Ontario College of Teachers. The Pass/Fail determination is based on the Faculty Advisor's Final Summative Practicum Report/Portfolio Assessment, which documents the overall field experience using a range of criteria. Satisfactory performance in practice teaching is essential for success.

Generally, in order to pass, a teacher candidate will have received "Satisfactory" Summative assessments from the Associate/Mentor Teacher at the end of each placement. However, in cases where a teacher candidate receives a "Borderline" Summative assessment in the first placement, but receives "Satisfactory" Summative evaluations in all subsequent placements, the teacher candidate's status will be reviewed by the Associate Dean, Pre-Service. A teacher candidate who receives a "Borderline" assessment in either of the final two placements will be required to complete an additional placement and obtain a "Satisfactory" Summative assessment.

A teacher candidate who receives a Summative “Borderline” assessment will be notified in writing that he/she is in danger of not meeting the standard required in order to obtain a Pass. Teacher candidates who receive either two Summative “Borderline” assessments or one Summative “Unsatisfactory” assessment have not met the standard required to obtain a Pass in 80-499. All such cases will be reviewed by the Associate Dean, Pre-Service, who will determine the next steps in the process. Placements which are terminated by the school will be considered “Unsatisfactory.”

Practicum Failure
It should be noted that failure may result from any serious contravention of the Ontario College of Teachers Standards of Practice and Ethical Standards for the Teaching Profession, including, but not limited to:
- Professional misconduct during the practicum component of the Faculty of Education program;
- Academic misconduct during the practicum component of the Faculty of Education program; and/or
- Neglect of teaching responsibilities and/or poor teaching performance during the practicum.

Failure due to issues related to performance in teaching practice, include, but are not limited to:
- Unsatisfactory performance in teaching practice (2 borderline or 1 unsatisfactory summative assessment); and/or
- An unsatisfactory portfolio assessment by the Faculty Advisor.

Failure for Cause
In certain circumstances a candidate may be deemed to have failed the Practice Teaching course, 80-499, for cause. Failure for cause may result from professional misconduct during the practicum and/or gross neglect of teaching duties. All cases of this kind are referred for investigation and decision to the Associate Dean, Pre-Service Education, who may refer the matter to the Professional Standards Committee.

Sessional records
Sessional records include term assignments, oral and written tests, and practical work. The general attitude of the candidate to his or her work, adaptability to teaching, and the probability of future success as a teacher may be taken into consideration in determining sessional standing.

Final grades
Final grades awarded are based upon the accumulated evaluation of the candidate. Formal final examinations may be held; however, no formal supplemental examinations will be allowed.

STANDING REQUIRED FOR GRADUATION
To complete the Bachelor of Education (BEd) Degree and be recommended to the Ontario College of Teachers for certification, teacher candidates must meet the expectations in all areas of the pre-service education program. This means that candidates must successfully complete their course work, field experience (Each teacher candidate must receive a pass in 80-499 as a prerequisite for both the BEd degree and recommendation for certification to the Ontario College of Teachers), professional learning series activities and the Professional Growth Portfolio.

TEACHER CERTIFICATION
The Faculty of Education and Academic Development provides programs and courses in teacher education but does not issue a teaching certificate. The responsibility for teacher certification lies with the Ontario College of Teachers. Upon successful completion of the requirements for teacher certification in Ontario, a recommendation will be made by the Dean of the Faculty to the Ontario College of Teachers indicating eligibility for the Ontario Certificate of Qualification. Candidates who successfully complete either the Consecutive or the Concurrent Programs of Study including Practice Teaching will be awarded the BEd degree of the University of Windsor, and will be recommended to the Ontario College of Teachers indicating eligibility for an Ontario Certificate of Qualification.

DEGREE REQUIREMENTS

Total courses: 154 credits

Major requirements:
For all Divisions (P/J, J/I, I/S):

80-201. Foundations of Practice Pt. I (1.5)
80-202. Foundations of Practice Pt. II (1.5)
80-203. Educational Psychology (3)
80-204. Differentiated Instruction (3)
80-205. Foundations of Practice Pt III (1.5)
80-206. Aboriginal Ways of Knowing: Cultural, Political & Linguistic Contexts (1.5)
80-207. Service Learning Specialization (3)
80-208. Assessment and Evaluation (1.5)
80-209. Critical Analysis of Social, Global & Cultural Issues in Education (1.5)
80-499. Practicum (16)

Professional Development: Professional Learning Series (approximately 10 days during the Fall/Winter) (non-credit)

Primary/Junior Stream
General Methodology Courses:
80-211. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (12)
80-215. Mathematics Foundations (3)
80-312. Digital Technology and Social Media Applications (3)
80-313. Health and Physical Education (3)
80-314. Language Arts (3)
80-315. Mathematics Methodology (3)
80-317. Science (3)80-318. Social Studies (3)
80-414. Language and Media Literacy (3)

Optional Course:
80-200. Religious Education in Roman Catholic Schools (1.5)*
**80-200 is a requirement for students who wish to teach in the Catholic school system in Ontario.*

Junior/Intermediate Stream
General Methodology Courses:
80-221. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (12)
80-225. Mathematics Foundations (1.5)
80-322. Digital Technology and Social Media Applications (3)
80-323. Health and Physical Education (3)
80-324. Language Arts (1.5)
80-325. Mathematics Methodology (1.5)
80-327. Science (3)
80-328. Social Studies (3)
80-424. Language and Media Literacy (1.5)

Specialised Methodology Courses:
One Teachable (6) to be selected from the following:
80-352. Art (6)
80-356. English (6)
80-358. French (6)
80-362. History (6)
80-366. Mathematics (6)
80-367. Music (Instruments) (6)
80-368. Music (Vocals) (6)
80-369. Health and Physical Education (6)
80-379. Drama (6)
80-380. General Science (6)

Optional Course:
80-200. Religious Education in Roman Catholic Schools (1.5)*
**80-200 is a requirement for students who wish to teach in the Catholic school system in Ontario.*

Intermediate/Senior Stream
General Methodology Courses:
80-231. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (4.5)
80-332. Digital Technology and Social Media Applications (3)
80-333. Health and Physical Education (1.5)
80-334. Language across the Curriculum (1.5)
80-335. Mathematics (1.5)
80-337. Science (1.5)
80-338. Social Studies (1.5)
80-339. Career and Guidance Education (3)

Specialised Methodology Courses:
Two Teachables (6 each) to be selected from the following:

80-352. Art (6)
80-356. English (6)
80-358. French (6)
80-362. History (6)
80-366. Mathematics (6)
80-367. Music (Instruments) (6)
80-368. Music (Vocals) (6)
80-369. Health and Physical Education (6)
80-373. Biology (6)
80-374. Chemistry (6)
80-376. Physics (6)
80-377. Social Sciences (6)
80-379. Drama (6)
80-380. General Science (6)

Optional Course:
80-200. Religious Education in Roman Catholic Schools (1.5)*
**80-200 is a requirement for students who wish to teach in the Catholic school system in Ontario.*

RECOMMENDED COURSE SEQUENCING
Generally, teacher candidates are expected to follow the four semester schedule in sequence, as noted below:
Primary/Junior Stream – Course Sequence

SEMESTER I (9 weeks courses, 5 practicum)
80-201. Foundations of Practice Pt. I
80-202. Foundations of Practice Pt. II
80-203. Educational Psychology
80-204. Differentiated Instruction
80-211 Pedagogy of the Arts: Music, Visual Art, Dance/Drama
80-215. Mathematics Foundations
80-312. Digital Technology and Social Media Applications
80-314. Language Arts
80-499. Practicum

SEMESTER II (9 weeks courses, 6 practicum)
80-203. Educational Psychology (cont'd)
80-204. Differentiated Instruction (cont'd)
80-208. Assessment and Evaluation
80-211. Pedagogy of the Arts: Music, Visual Art, Dance/Drama cont'd
80-215. Mathematics Foundations (cont'd)
80-312. Digital Technology and Social Media Applications (cont'd)
80-314. Language Arts (cont'd)
80-499. Practicum (cont'd)

SEMESTER III (9 weeks courses, 5 practicum)
80-205. Foundations of Practice Pt III
80-207. Service Learning Specialization
80-209. Critical Analysis of Social, Global & Cultural Issues in Education (1.5)
80-211. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (cont'd)
80-313. Health and Physical Education
80-315. Mathematics Methodology
80-317. Science80-318. Social Studies
80-414. Language and Media Literacy
80-499. Practicum (cont'd)

SEMESTER IV (9 weeks courses, 6 practicum)
80-206. Aboriginal Ways of Knowing: Cultural, Political & Linguistic Contexts
80-207. Service Learning Specialization (cont'd)
80-211. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (cont'd)
80-313. Health and Physical Education (cont'd)
80-315. Mathematics Methodology (cont'd)
80-317. Science (cont'd)80-318. Social Studies (cont'd)
80-414. Language and Media Literacy (cont'd)
80-499. Practicum (cont'd)
Optional Course:
80-200. Religious Education in Roman Catholic Schools*
**80-200 is a requirement for students who wish to teach in the Catholic school system in Ontario.*

Professional Development: Professional Learning Series (approximately 10 days during the Fall/Winter) (non-credit)

Junior/Intermediate Stream – Course Sequence

SEMESTER I (9 weeks courses, 5 practicum)
80-201. Foundations of Practice Pt. I
80-202. Foundations of Practice Pt. II
80-203. Educational Psychology
80-204. Differentiated Instruction
80-221. Pedagogy of the Arts: Music, Visual Art, Dance/Drama
80-324. Language Arts
80-327. Science
80-328. Social Studies
80-499. Practicum
Teachable Pt I

SEMESTER II (9 weeks courses, 6 practicum)
80-203. Educational Psychology (cont'd)
80-204. Differentiated Instruction (cont'd)
80-208. Assessment and Evaluation
80-221. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (cont'd)
80-327. Science (cont'd)
80-328. Social Studies (cont'd)
80-424. Language and Media Literacy
80-499. Practicum (cont'd)
Teachable Pt I (cont'd)

SEMESTER III (9 weeks courses, 5 practicum)
80-205. Foundations of Practice Pt III
80-207. Service Learning Specialization
80-209. Critical Analysis of Social, Global & Cultural Issues in Education
80-221. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (cont'd)
80-225. Mathematics Foundations
80-322. Digital Technology and Social Media Applications
80-323. Health and Physical Education
80-499. Practicum (cont'd)
Teachable Pt II

SEMESTER IV (9 weeks courses, 6 practicum)
80-206. Aboriginal Ways of Knowing: Cultural, Political & Linguistic Contexts
80-207. Service Learning Specialization (cont'd)
80-221. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (cont'd)
80-322. Digital Technology and Social Media Applications (cont'd)
80-323. Health and Physical Education (cont'd)
80-325. Mathematics Methodology
80-499. Practicum (cont'd)
Teachable Pt II (cont'd)

Optional Course:
80-200. Religious Education in Roman Catholic Schools*
**80-200 is a requirement for students who wish to teach in the Catholic school system in Ontario.*

Professional Development: Professional Learning Series (approximately 10 days during the Fall/Winter) (non-credit)

Intermediate/Senior Stream – Course Sequence

SEMESTER I (9 weeks courses, 5 practicum)
80-201. Foundations of Practice Pt. I
80-202. Foundations of Practice Pt. II
80-203. Educational Psychology
80-204. Differentiated Instruction
80-231. Pedagogy of the Arts: Music, Visual Art, Dance/Drama
80-332. Digital Technology and Social Media Applications
80-334. Language across the Curriculum
80-499. Practicum
Teachable I Pt I
Teachable II Pt I

SEMESTER II (9 weeks courses, 6 practicum)
80-203. Educational Psychology (cont'd)
80-204. Differentiated Instruction (cont'd)
80-208. Assessment and Evaluation
80-231. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (cont'd)

80-332. Digital Technology and Social Media Applications (cont'd)
80-333. Health and Physical Education
80-499. Practicum (cont'd)
Teachable I Pt I (cont'd)
Teachable II Pt I (cont'd)

SEMESTER III (9 weeks courses, 5 practicum)
80-205. Foundations of Practice Pt III
80-207. Service Learning Specialization
80-209. Critical Analysis of Social, Global & Cultural Issues in Education
80-231. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (cont'd)
80-335. Mathematics
80-339. Career and Guidance Education
80-499. Practicum (cont'd)
Teachable I Pt II (cont'd)
Teachable II Pt II (cont'd)

SEMESTER IV (9 weeks courses, 6 practicum)
80-206. Aboriginal Ways of Knowing: Cultural, Political & Linguistic Contexts
80-207. Service Learning Specialization (cont'd)
80-231. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (cont'd)
80-337. Science
80-338. Social Studies
80-339. Career and Guidance Education (cont'd)
80-499. Practicum (cont'd)
Teachable I Pt II (cont'd)
Teachable II Pt II (cont'd)

Optional Course:
80-200. Religious Education in Roman Catholic Schools*
**80-200 is a requirement for students who wish to teach in the Catholic school system in Ontario.*

Professional Development: Professional Learning Series (approximately 10 days during the Fall/Winter) (non-credit)

Concurrent Bachelor of Arts in French Studies (Honours)/Bachelor of Education
As of Fall 2014, there are no new admissions to this program.

The Concurrent Bachelor of Arts in French Studies/Bachelor of Education Program is offered jointly over five years by the French Studies Program and the Faculty of Education and Academic Development. The program prepares individuals to teach at the junior and intermediate levels (grades 4 to 10), with a particular emphasis on teaching French as a Second Language in grades 4 to 8. Graduates of this program will receive two degrees and will acquire the necessary skills and knowledge for teaching French as a Second Language (Core French or Immersion) in the English language school system (Public or Roman Catholic school system) and fulfil the requirements for certification by the Ontario College of Teachers. It offers students the opportunity to begin working towards teaching certification early in their academic career. Students can qualify for the Bachelor of Arts (Honours) degree in French Studies while concurrently practice teaching in schools. Preparation for practice teaching begins in year two of the program. All students should see an advisor in the French Studies Program and in the Faculty of Education and Academic Development, each year, to discuss course selection and academic progress.

APPLICATION AND ADMISSION
Admission is to first-year only. Applicants must present six Grade 12 "U" or "M" courses including Grade 12 "U" English I, Grade 12 "U" French, or their equivalents (such as Collège Boréal High School equivalency French courses) to be accepted.

PROGRAM REQUIREMENTS

Total courses: fifty-three

Major requirements: twenty-three courses, consisting of:
(a) eight Language Training courses: 29-123, 29-223 or 29-121 and 29-122, 29-215 (or 29-315), 29-325, 29-328, 29-329;
(b) five Literature courses: 29-141 and 29-357, plus one 200-level course, and two 200, 300 or 400-level courses (students are strongly encouraged to choose a

range of Literature courses from France, Francophone Canada and the Francophone World);
(c) four Linguistics courses: 29-230, and 29-231, and two of 29-330, 29-332, 29-333;
(d) one additional 200, 300 or 400-level course in Literature or one 300 or 400-level course in Linguistics;
(e) one Franco-Canadian course;
(f) one 400-level course;
(g) two Culture courses: 29-260, 29-270, 29-281 or 29-283;
(h) one additional course from any area in French Studies.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Arts or Science;
(c) two courses from any area of study, excluding Arts.

Students must choose four of these courses from a list provided by the Faculty of Education and Academic Development. (See Appendix 1)

Other requirements: eleven courses, consisting of:
(a) 01-150, 01-151;
(b) eight courses from any area of study, excluding French Studies courses;
(b) one course from any area of study, including French Studies courses.

Education requirements:
Year 2: 80-199;
Year 3: 80-299;
Year 4: 80-399.
Year 5 Professional Year: 80-203, 80-204, 80-205, 80-209, 80-321, 80-322, 80-323, 80-324, 80-325, 80-326, 80-327, 80-328, 80-358, 80-499

Requirements can also be met for teaching in the Roman Catholic school system by taking 80-200.

PRACTICE TEACHING
Students pursuing a Concurrent Bachelor of Arts in French Studies (Honours)/Bachelor of Education degrees are required to participate in practice teaching. Directed observation and practice teaching will be arranged by the Faculty of Education and Academic Development to include practical experience in appropriate schools and programs from grades 4 to 10, inclusive.

STANDING REQUIRED FOR CONTINUATION IN PROGRAM
Students must comply with general university regulations. Normally, students complete all requirements for a Bachelor of Arts in French Studies (Honours)/Bachelor of Education in five years. Any variation in the course sequence prescribed above must be approved by the Dean of Arts and Social Sciences and the Dean of Education or their designates. Students must obtain and maintain a minimum major average of 70% in French Studies courses in order to remain in the Concurrent Bachelor of Arts in French Studies/Bachelor of Education Program. Students placed on academic probation because of an average below 70% will be asked to withdraw from the concurrent program, but will be permitted to continue in the French Studies degree program. Students will prepare a Learning Portfolio to document their experiences in the sequence 80-199, 80-299 (or student exchange), and 80-399. Admission to the Professional Year (Year 5) will be based on successful attainment of the grade point average requirements specified above and successful review of the Learning Portfolio.

STANDING REQUIRED FOR GRADUATION AND CERTIFICATION
For Standing Required for Graduation, see *Undergraduate Regulations.*
Graduates of the program will receive both the Bachelor of Arts in French Studies (Honours) and the Bachelor of Education degrees. The Faculty of Education and Academic Development does not issue a teaching certificate. The Ontario Certificate of Qualification is issued by the Ontario College of Teachers upon recommendation of the Dean of the Faculty of Education and Academic Development. Only Canadian citizens or Permanent Residents of Canada qualify for this certificate. Students must obtain and maintain a minimum average of 70% in French Studies courses in order to graduate. Students who obtain three or more final grades in Education courses below 65% will not be recommended for certification by the Ontario College of Teachers. Students who are unsuccessful in practice teaching or obtain a grade below 50% in any Education course will not be recommended for either a Bachelor of Education degree or certification by the Ontario College of Teachers.

Appendix 1: List of courses recommended by the Faculty of Education and Academic Development to fulfil the Option Requirements

Note: Some courses in this list may have prerequisites

Six courses in the following categories:
(a) two courses from Social Sciences;
(b) two courses from Arts or Science;
(c) two courses from any area of study, excluding Arts.

Biology
55-100 Biology of Organisms

55-101 Organisms and the Environment

Chemistry

59-201 Chemistry in the Marketplace

Communication, Media and Film

40-101 Introduction to Communication Studies

Earth Sciences
66-110 Natural Hazards and Disasters.
English
26-100 Composition*

26-128 Women and Literature

General Arts

01-209 Ethics in the Professions*
02-100 Introduction to Canadian Studies

Labour Studies

54-100 Labour and Social Movements in Canadian Society

Music

32-107 Explorations on Music

Philosophy

34-129 Contemporary Moral Issues
34-160 Reasoning Skills*
34-227 Environmental Ethics*
34-228 Technology, Human Values and the Environment*

Physics

64-114 Physical Concepts and Numeracy I

Political Science

45-130 Comparative Politics in a Changing World
45-160 Issues in World Politics
45-170 Introduction to Diaspora Studies: There's No Place Like Home
45-212 Environmental Policy and Politics*

Psychology

46-115 Introduction to Psychology as a Behavioural Science
46-116 Introduction to Psychology as a Social Science
46-223 Developmental Psychology: The Child**
46-224 Developmental Psychology: Adolescence**

Social Work

47-117 Meeting Human Needs through Social Welfare
47-118 Meeting Human Needs through Social Work
47-210 Social Work and Diversity

Visual Arts

27-110 Introductory Drawing (for Non-Majors)

27-111 Introductory Drawing (for Non-Majors) II

Women's Studies

53-100 Women in Canadian Society
53-106 Women and Religion
53-120 Gal Pals: Women and Friendship

53-130 Imagining Women

* Recommended
** Highly Recommended

Concurrent Bachelor of Mathematics (Honours) /Bachelor of Education
As of Fall 2014, there are no new admissions to this program.

The Concurrent Bachelor of Mathematics/Bachelor of Education Program is offered jointly over five years by the Department of Mathematics and Statistics and the Faculty of Education and Academic Development. The aim is to provide the opportunity and education to individuals who wish to teach mathematics in schools at the intermediate and senior levels (Grade 7 through the end of secondary school). Graduates of this program will receive two degrees and will acquire the necessary skills and knowledge for two teachable subjects and fulfill the requirements for certification by the Ontario College of Teachers.

It offers students the opportunity to begin working towards teaching certification early in their academic career. Students can qualify for the Bachelor of Mathematics (Honours) degree while concurrently practice teaching in schools. Preparation for practice teaching begins in year two of the program. All students should see an advisor in the Department of Mathematics and Statistics, and in the Faculty of Education and Academic Development, on a regular basis, to discuss course selection and academic progress.

APPLICATION AND ADMISSION
Admission is to first-year only. Applicants must present six Grade 12 "U" or "M" courses including Grade 12 "U" English I, Grade 12 "U" Advanced Functions and Introductory Calculus, and Grade 12 "U" Geometry and Discrete Mathematics, or their equivalents.

PROGRAM REQUIREMENTS

Total courses: fifty-five.

Major requirements: twenty-two courses, consisting of 62-120 or 62-125, 62-140 or 62-139, 62-141, 62-190, 62-215, 62-216, 62-220, 62-221, 62-314, 62-315, 62-318, 62-321, 65-250, 65-251; plus eight more courses (62- or 65-) at the 300 level or above.

Other requirements:(a) 60-140 and 60-141;(b) four additional courses from Arts/Languages or Social Sciences chosen from the following list of courses: 01-209*, 02-100, 26-100*, 26-128, 27-110, 27-111, 32-107, 34-129, 34-160*, 34-227*, 34-228*, 40-101, 40-262**, 45-130, 45-160, 45-170, 45-212*, 46-115, 46-116, 46-223, 46-224**, 47-117, 47-118, 47-210, 53-100, 53-106, 53-120, 53-130, and 54-100.

(* Recommended; ** Strongly recommended);(c) six courses based on the second teachable as specified below (if the second teachable is a Science subject):

Second Teachable	Courses
Biology	Six Biology courses which satisfy the requirements for an Honours degree in Biological Sciences, including 55-140 and 55-141;
Chemistry	Six Chemistry courses which satisfy the requirements for an Honours degree in Chemistry, including 59-140 and 59-141;
Computer Science	Four Computer Science courses which satisfy the requirements for an Honours degree in Computer Science, including 60-100, and two courses from any area of study;

Physics	Six Physics courses which satisfy the requirements for an Honours degree in Physics, including 64-140 and 64-141;

or six courses from any area of study if the second teachable is from a discipline in the Faculty of Arts and Social Sciences.(d) six courses* from any area of study (if the second teachable is a Science subject) or six courses from a discipline in the Faculty of Arts and Social Sciences, approved by the Department associated with the second teachable and the Faculty of Education and Academic Development.
* Note that the six courses will be in addition to the courses taken in the discipline under (b) above.

Education courses:
Year 2: 80-199;
Year 3: 80-299;
Year 4: 80-399.
Year 5: 80-203, 80-204, 80-205, 80-209, 80-330, 80-332, 80-334, 80-340 plus two of 80-331, 80-333, 80-335, 80-336, 80-337, 80-338, or 80-339; plus two of 80-353, 80-366, 80-373, 80-374, 80-376, or 80-380 ; 80-499.

Requirements can also be met for teaching in the Roman Catholic school system by taking 80-200.

STANDING REQUIRED FOR CONTINUATION
Students must maintain a cumulative average of at least 60%, and an average of at least 70% over the courses taken in each of the two teachable areas in order to continue in the Concurrent Program. Students are expected to enroll in the Concurrent Program on a full-time basis thereby completing the Bachelor of Mathematics (Honours) portion of the program in four years and must take according to schedule the required Science and non-Science courses. Students who do not take a selection of courses that lead to the normal completion of all requirements will be required to withdraw from the Concurrent Program. Students who did not follow the regular semester sequence will be required to reapply to the Concurrent Program after an absence of more than one semester.Students will prepare a learning portfolio to document their experiences in the sequence 80-199, 80-299 and 80-399. Admission to the Professional Year (Year 5) will be based on successful attainment of a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas, and successful review of the Learning Portfolio.

Concurrent Honours Chemistry with Thesis/Bachelor of Education
As of Fall 2014, there are no new admissions to this program.

PROGRAM REQUIREMENTS
All students are required to complete the requirements of the Honours Chemistry with Thesis degree program, in addition to the Education courses listed below. Chemistry will be the first teachable subject for students in this program. All students must select a second teachable subject from Biology, Computer Science, Mathematics and Physics, and take six courses in the selected subject which satisfy the major requirements for an Honours degree in the selected subject. Students are advised to seek counselling in the Department of Chemistry to ensure that their selection of courses fulfills the requirements for the Honours Chemistry with Thesis degree and the requirements for the second teachable subject.

Total courses: fifty-five.

***Major requirements*:** twenty courses, including 59-140, 59-141, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-261, 59-320, 59-321, 59-330, 59-340, 59-350, 59-410* and four additional Chemistry courses at the 300 or 400 level.**It should be noted that only students who have maintained a major average of 70% and a cumulative average of 70% will be permitted to enroll in 59-410.*

Other requirements:(a) 62-140, 62-141, 64-140 and 64-141;(b) 62-120 and two additional courses based on the second teachable as specified below:

Second Teachable	Courses

Biology	Two courses from 60-106, 62-215, 62-216, 64-220 or 64-222;
Computer Science	Two courses from 62-215, 62-216, 64-220 or 64-222;
Mathematics	62-215 and 62-216;
Physics	Two courses from 62-215 or 62-216 and 64-220 or 64-222;

(c) four additional courses from Arts/Languages or Social Sciences chosen from the following list of courses: 01-209*, 02-100, 26-100*, 26-128, 27-110, 27-111, 32-107, 34-129, 34-160*, 34-227*, 34-228*, 40-101, 40-262**, 45-130, 45-160, 45-170, 45-212*, 46-115, 46-116, 46-223, 46-224**, 47-117, 47-118, 47-210, 53-100, 53-106, 53-120, 53-130, and 54-100. (* Recommended; ** Strongly recommended);(d) nine courses from any area of study based on the second teachable as specified below:

Second Teachable	Courses
Biology	Six Biology courses which satisfy the requirements for an Honours degree in Biological Sciences, including 55-140 and 55-141, and three courses from any area of study.
Computer Science	Six Computer Science courses which satisfy the requirements for an Honours degree in Computer Science, including 60-100, 60-140 and 60-141, and three courses from any area of study.
Mathematics	One Mathematics course which satisfies the requirements for an Honours degree in Mathematics and eight courses from any area of study.
Physics	Three Physics courses which satisfy the requirements for an Honours degree in Physics and six courses from any area of study including the Mathematics prerequisites for Physics courses not included under (a) and (b).

Education courses:
Year 2: 80-199;
Year 3: 80-299 ;
Year 4: 80-399.
Year 5: 80-203, 80-204, 80-205, 80-209, 80-330, 80-332, 80-334, 80-340 plus two of 80-331, 80-333, 80-335, 80-336, 80-337, 80-338, or 80-339; plus two of 80-353, 80-366, 80-373, 80-374, 80-376, or 80-380 ; 80-499.
Requirements can also be met for teaching in the Roman Catholic school system by taking 80-200.

STANDING REQUIRED FOR CONTINUATION
Students must maintain a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas in order to continue in the Concurrent Program.Students are expected to enroll in the Concurrent Program on a full-time basis thereby completing the Honours Chemistry with Thesis portion of the program in four years and must take according to schedule the required Science and non-Science courses. Students who do not take a selection of courses that lead to the normal completion of all requirements will be required to withdraw from the Concurrent Program. Students who did not follow the regular semester sequence will be required to reapply to the Concurrent Program after an absence of more than one semester. Students will prepare a learning portfolio to document their experiences in the sequence 80-199, 80-299 and 80-399. Admission to the Professional Year (Year 5) will be based on successful attainment of a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas, and successful review of the Learning Portfolio.

Concurrent Honours Chemistry/Bachelor of Education ***(without thesis)***
As of Fall 2014, there are no new admissions to this program.

All students are required to complete the requirements of the Honours Chemistry degree program, in addition to the Education courses listed below. Chemistry will be the first teachable subject for students in this program. All students must select a second teachable subject from Biology, Computer Science, Mathematics and Physics, and take six courses in the selected subject which satisfy the major requirements for an Honours degree in the selected subject. Students are advised to seek counselling in the Department of Chemistry to ensure that their selection of courses fulfills the requirements for the Honours Chemistry degree and the requirements for the second teachable subject.

Total courses: fifty-five.

Major requirements: twenty courses, including 59-140, 59-141, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-261, 59-320, 59-321, 59-330, 59-340, 59-350 and six additional Chemistry courses at the 300 or 400 level.**Other requirements:**(a) 62-140, 62-141, 64-140 and 64-141;(b) 62-120 and two additional courses based on the second teachable as specified below:

Second Teachable	Courses
Biology	Two courses from 60-106, 62-215, 62-216, 64-220 or 64-222;
Computer Science	Two courses from 62-215, 62-216, 64-220 or 64-222;
Mathematics	62-215 and 62-216;
Physics	Two courses from 62-215 or 62-216 and 64-220 or 64-222;

(c) four additional courses from Arts/Languages or Social Sciences chosen from the following list of courses: 01-209*, 02-100, 26-100*, 26-128, 27-110, 27-111, 32-107, 34-129, 34-160*, 34-227*, 34-228*, 40-101, 40-262**, 45-130, 45-160, 45-170, 45-212*, 46-115, 46-116, 46-223, 46-224**, 47-117, 47-118, 47-210, 53-100, 53-106, 53-120, 53-130, and 54-100. (* Recommended; ** Strongly recommended);(d) nine courses from any area of study based on the second teachable as specified below:

Second Teachable	Courses
Biology	Six Biology courses which satisfy the requirements for an Honours degree in Biological Sciences, including 55-140 and 55-141, and three courses from any area of study.
Computer Science	Six Computer Science courses which satisfy the requirements for an Honours degree in Computer Science, including 60-100, 60-140 and 60-141, and three courses from any area of study.
Mathematics	One Mathematics course which satisfies the requirements for an Honours degree in Mathematics and eight courses from any area of study.
Physics	Three Physics courses which satisfy the requirements for an Honours degree in Physics and six courses from any area of study including the Mathematics prerequisites for Physics courses not included under (a) and (b).

Education courses:

Year 2: 80-199;
Year 3: 80-299;
Year 4: 80-399.
Year 5: 80-203, 80-204, 80-205, 80-209, 80-330, 80-332 , 80-334, 80-340 plus two of 80-331, 80-333, 80-335, 80-336, 80-337, 80-338, or 80-339; plus two of 80-353, 80-366, 80-373, 80-374, 80-376, or 80-380; 80-499.

Requirements can also be met for teaching in the Roman Catholic school system by taking 80-200.

STANDING REQUIRED FOR CONTINUATION
Students must maintain a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas in order to continue in the Concurrent Program.Students are expected to enroll in the Concurrent Program on a full-time basis thereby completing the Honours Chemistry portion of the program in four years and must take according to schedule the required Science and non-Science courses. Students who do not take a selection of courses that lead to the normal completion of all requirements will be required to withdraw from the Concurrent Program. Students who did not follow the regular semester sequence will be required to reapply to the Concurrent Program after an absence of more than one semester.Students will prepare a learning portfolio to document their experiences in the sequence 80-199, 80-299 and 80-399. Admission to the Professional Year (Year 5) will be based on successful attainment of a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas, and successful review of the Learning Portfolio.

Concurrent Honours Biological Sciences with thesis/Bachelor of Education
As of Fall 2014, there are no new admissions to this program.

All students are required to complete the requirements of the Honours Biological Sciences with Thesis degree program, in addition to the Education courses listed below. Biology will be the first teachable subject for students in this program. All students must select a second teachable subject from Chemistry, Computer Science, Mathematics and Physics, and take six courses in the selected subject which satisfy the major requirements for an Honours degree in the selected subject. Students are advised to seek counselling in the Department of Biological Sciences to ensure that their selection of courses fulfills the requirements for the Honours Biological Sciences with Thesis degree and the requirements for the second teachable subject. Undergraduate students may be allowed, with the consent of the instructor, to take one graduate course for credit in the Honours Biological Sciences Program.

Total courses: fifty-five.

Major requirements: twenty courses, including the “Core” courses 55-140, 55-141, 55-210, 55-211, 55-213, and 55-341; and fourteen other Biology courses including 55-420*. At least nine courses must be at the 300 level or above. (Recommended: 55-238 and 55-320.)* *It should be noted that only students who have maintained a major average of 70% and a cumulative average of 60% will be permitted to enroll in 55-420.*

Other requirements:(a) nine Science courses, including 59-140, 59-141, 59-230, 59-261, 62-140 or 62-139 or 62-130, 62-141, and 65-205 or 65-250 (if Mathematics is the second teachable), and one pair of Science courses based on the second teachable as specified below:

Second Teachable	Courses
Chemistry	60-106 and 60-205 or 66-140 and 66-141 or *64-140 and 64-141or 67-100 and 67-102;
Computer Science	60-140 and 60-141;
Mathematics	60-106 and 60-205 or 66-140 and 66-141 or *64-140 and 64-141or 67-100 and 67-102;
Physics	64-140 and 64-141;
* The pair 64-130 or 64-140 and 64-131 may be substituted for the pair 64-140 and 64-141.	

(b) courses from the second teachable at the 200 level or above which satisfy the requirements for an Honours degree in the teachable subject as specified below:

Second Teachable	Courses
Chemistry	Two Chemistry courses at the 200 level or above which satisfy the requirements for an Honours degree in Chemistry;
Computer Science	Four Computer Science courses at the 200 level or above which satisfy the requirements for an Honours degree in Computer Science;
Mathematics	Three Mathematics courses at the 200 level or above which satisfy the requirements for an Honours degree in Mathematics;
Physics	Four Physics courses at the 200 level or above which satisfy the requirements for an Honours degree in Physics;

(c) additional Science courses, including courses in Biology, based on the second teachable as specified below:

Second Teachable	Courses^^
Chemistry	Four courses from any area in Science, two of which must be at the 300 level or above;
Computer Science	Two courses from any area in Science at the 300 level or above;
Mathematics	Three courses from any area in Science, two of which must be at the 300 level or above;
Physics	Two courses from any area in Science at the 300 level or above;

^^41- XXX courses will be counted as Social Science courses.(d) four additional courses from Arts/Languages or Social Sciences chosen from the following list of courses: 01-209*, 02-100, 26-100*, 26-128, 27-110, 27-111, 32-107, 34-129, 34-160*, 34-227*, 34-228*, 40-101, 40-262**, 45-130, 45-160, 45-170, 45-212*, 46-115, 46-116, 46-223, 46-224**, 47-117, 47-118, 47-210, 53-100, 53-106, 53-120, 53-130, and 54-100.
(* Recommended; ** Strongly recommended);(e) an additional course based on the second teachable as specified below:

Second Teachable	Course
Chemistry	One course from any area of study.
Computer Science	60-100.
Mathematics	62-120 or 62-125.
Physics	One course from any area of study.

Education courses:
Year 2: 80-199;
Year 3: 80-299;
Year 4: 80-399.

Year 5: 80-203, 80-204, 80-205, 80-209, 80-330, 80-332, 80-334, 80-340 plus two of 80-331, 80-333, 80-335 , 80-336, 80-337, 80-338, or 80-339; plus two of 80-353, 80-366, 80-373, 80-374, 80-376, or 80-380; 80-499.

Requirements can also be met for teaching in the Roman Catholic school system by taking 80-200.

STANDING REQUIRED FOR CONTINUATION
Students must maintain a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas in order to continue in the Concurrent Program.Students are expected to enroll in the Concurrent Program on a full-time basis thereby completing the Honours Biological Sciences with Thesis portion of the program in four years and must take according to schedule the required Science and non-Science courses. Students who do not take a selection of courses that lead to the normal completion of all requirements will be required to withdraw from the Concurrent Program. Students who did not follow the regular semester sequence will be required to reapply to the Concurrent Program after an absence of more than one semester.Students will prepare a learning portfolio to document their experiences in the sequence 80-199, 80-299 and 80-399. Admission to the Professional Year (Year 5) will be based on successful attainment of a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas, and successful review of the Learning Portfolio.

Concurrent Honours Biological Sciences/Bachelor of Education *(without thesis)*
As of Fall 2014, there are no new admissions to this program.

All students are required to complete the requirements of the Honours Biological Sciences degree program, in addition to the Education courses listed below. Biology will be the first teachable subject for students in this program. All students must select a second teachable subject from Chemistry, Computer Science, Mathematics and Physics, and take six courses in the selected subject which satisfy the major requirements for an Honours degree in the selected subject.Students are advised to seek counselling in the Department of Biological Sciences to ensure that their selection of courses fulfills the requirements for the Honours Biological Sciences degree and the requirements for the second teachable subject. Undergraduate students may be allowed, with the consent of the instructor, to take one graduate course for credit in the Honours Biological Sciences Program.

Total courses: fifty-five.

Major requirements: twenty courses, including the “Core” courses 55-140, 55-141, 55-210, 55-211, 55-213, and 55-341; and fourteen other Biology courses. At least nine courses must be at the 300 level or above. (Recommended: 55-238 and 55-320.)

Other requirements:(a) nine Science courses, including 59-140, 59-141, 59-230, 59-261, 62-140 or 62-139 or 62-130, 62-141, and 65-205 or 65-250 (if Mathematics is the second teachable), and one pair of Science courses based on the second teachable as specified below:

Second Teachable	Courses
Chemistry	60-106 and 60-205 or 66-140 and 66-141 or *64-140 and 64-141or 67-100 and 67-102;
Computer Science	60-140 and 60-141;
Mathematics	60-106 and 60-205 or 66-140 and 66-141 or *64-140 and 64-141or 67-100 and 67-102;
Physics	64-140 and 64-141;
* The pair 64-130 or 64-140 and 64-131 may be substituted for the pair 64-140 and 64-141.	

(b) courses from the second teachable at the 200 level or above which satisfy the requirements for an Honours degree in the teachable subject as specified below:

Second Teachable	Courses
Chemistry	Two Chemistry courses at the 200 level or above which satisfy the requirements for an Honours degree in Chemistry;
Computer Science	Four Computer Science courses at the 200 level or above which satisfy the requirements for an Honours degree in Computer Science;
Mathematics	Three Mathematics courses at the 200 level or above which satisfy the requirements for an Honours degree in Mathematics;
Physics	Four Physics courses at the 200 level or above which satisfy the requirements for an Honours degree in Physics;

(c) additional Science courses, including courses in Biology, based on the second teachable as specified below:

Second Teachable	Courses^^
Chemistry	Four courses from any area in Science, two of which must be at the 300 level or above;
Computer Science	Two courses from any area in Science at the 300 level or above;
Mathematics	Three courses from any area in Science, two of which must be at the 300 level or above;
Physics	Two courses from any area in Science at the 300 level or above;

^^41- XXX courses will be counted as Social Science courses.

(d) four additional courses from Arts/Languages or Social Sciences chosen from the following list of courses: 01-209*, 02-100, 26-100*, 26-128, 27-110, 27-111, 32-107, 34-129, 34-160*, 34-227*, 34-228*, 40-101, 40-262**, 45-130, 45-160, 45-170, 45-212*, 46-115, 46-116, 46-223, 46-224**, 47-117, 47-118, 47-210, 53-100, 53-106, 53-120, 53-130, and 54-100. (* Recommended; ** Strongly recommended);(e) an additional course based on the second teachable as specified below:

Second Teachable	Course
Chemistry	One course from any area of study.
Computer Science	60-100.
Mathematics	62-120 or 62-125.
Physics	One course from any area of study.

Education courses:
Year 2: 80-199;
Year 3: 80-299;
Year 4: 80-399.
Year 5: 80-203, 80-204, 80-205, 80-209, 80-330, 80-332, 80-334, 80-340 plus two of 80-331, 80-333, 80-335, 80-336, 80-337, 80-338, or 80-339; plus two of 80-353, 80-366, 80-373, 80-374, 80-376 , or 80-380; 80-499.
Requirements can also be met for teaching in the Roman Catholic school system by taking 80-200.

STANDING REQUIRED FOR CONTINUATION
Students must maintain a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas in order to continue in the Concurrent Program.Students are expected to enroll in the Concurrent Program on a full-time basis thereby completing the Honours Biological Sciences portion of the program in four years and must take according to schedule the required Science and non-Science courses. Students who do not take a selection of courses that lead to the normal completion of all requirements will be required to withdraw from the Concurrent Program. Students who did not follow the regular semester sequence will be required to reapply to the Concurrent Program after an absence of more than one semester.Students will prepare a learning portfolio to document their experiences in the sequence 80-199, 80-299 and 80-399. Admission to the Professional Year (Year 5) will be based on successful attainment of a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas, and successful review of the Learning Portfolio.

Concurrent Bachelor of Computer Science (Honours)/Bachelor of Education
As of Fall 2014, there are no new admissions to this program.

All students are required to complete the requirements of the Bachelor of Computer Science (Honours) degree program, in addition to the Education courses listed below. Computer Science will be the first teachable subject for students in this program. All students must select a second teachable subject from Biology, Chemistry, Mathematics and Physics, and take six courses in the selected subject which satisfy the major requirements for an Honours degree in the selected subject. Students are advised to seek counselling in the School of Computer Science to ensure that their selection of courses fulfills the requirements for the Bachelor of Computer Science (Honours) degree and the requirements for the second teachable subject.

Total courses: fifty-five.

Major requirements: twenty-one courses, consisting of 60-100, 60-140, 60-141, 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, 60-266, 60-311, 60-315, 60-322, 60-330, 60-354, 60-367, 60-440, 60-454, 60-496 or 60-499, plus one additional Computer Science course at the 300 or 400 level. The major average will be calculated on the basis of grades obtained in 60-100, 60-140, 60-141, 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, 60-266, 60-311, 60-315, 60-322, 60-330, 60-354, 60-367, 60-440, 60-454, and either 60-496 or 60-499 or both.

Other requirements:(a) 62-120 or 62-125, 62-140 or 62-139, 62-141, 62-190, 62-369 or 62-380 and 65-205 or 65-250 (if Mathematics is the second teachable);(b) four additional courses from Arts/Languages or Social Sciences chosen from the following list of courses: 01-209*, 02-100, 26-100*, 26-128, 27-110, 27-111, 32-107, 34-129, 34-160*, 34-227*, 34-228*, 40-101, 40-262**, 45-130, 45-160, 45-170, 45-212*, 46-115, 46-116, 46-223, 46-224**, 47-117, 47-118, 47-210, 53-100, 53-106, 53-120, 53-130, and 54-100.

(* Recommended; ** Strongly recommended);(c) three courses at the 200-400 level from Mathematics/Statistics or Computer Science (excluding 60-205, 60-207, 60-270, 60-305); if Physics is the second teachable, three courses including Mathematics prerequisites for Physics courses not included under (a);(d) six other courses based on the second teachable as specified below:

Second Teachable	Courses
Biology	Six Biology courses which satisfy the requirements for an Honours degree in Biological Sciences, including 55-140 and 55-141;
Chemistry	Six Chemistry courses which satisfy the requirements for an Honours degree in Chemistry, including 59-140 and 59-141;
Physics	Six Physics courses which satisfy the requirements for an Honours degree in Physics, including 64-140 and 64-141;

Education courses:
Year 2: 80-199;
Year 3: 80-299;
Year 4: 80-399.
Year 5: 80-203, 80-204, 80-205, 80-209, 80-330, 80-332, 80-334, 80-340 plus two of 80-331, 80-333, 80-335, 80-336, 80-337, 80-338, or 80-339; plus two of 80-353, 80-366, 80-373, 80-374, 80-376, or 80-380; 80-499.
Requirements can also be met for teaching in the Roman Catholic school system by taking 80-200.

STANDING REQUIRED FOR CONTINUATION
Students must maintain a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas in order to continue in the Concurrent Program.Students are expected to enroll in the Concurrent Program on a full-time basis thereby completing the Bachelor of Computer Science (Honours) portion of the program in four years and must take according to schedule the required Science and non-science courses. Students who do not take a selection of courses that lead to the normal completion of all requirements will be required to withdraw from the Concurrent Program. Students who did not follow the regular semester sequence will be required to reapply to the Concurrent Program after an absence of more than one semester.Students will prepare a learning portfolio to document their experiences in the sequence 80-199, 80-299 and 80-399. Admission to the Professional Year (Year 5) will be based on successful attainment of a cumulative average of at least 60% and an average of at least 70% over the courses taken in each of the two teachable areas, and successful review of the Learning Portfolio.

Bachelor of Education/Diploma in Technological Education
As of Fall 2014, there are no new admissions to this program.

Admission Requirements
In addition, applicants will need to meet all three of the following admission requirements:
1. Ontario secondary school graduation, or its equivalent.
2. One of:
- five years of skilled wage-earning business or industrial experience in the selected Technological Studies area, OR
- a combination of post-grade 12 education related to the selected Technological Studies area, and skilled business or industrial experience totaling at least five years. The latter must include at least two years of skilled wage-earning experience in the selected Technological Studies area of which no fewer than sixteen months must have been spent in continuous employment, OR
- at least 3700 hours of skilled wage-earning experience and successful completion of a post-secondary education program acceptable to the Ontario College of Teachers and which includes at least 24 months (6 semesters of full-time study) of academic studies related to the selected Technological Studies area. This wage-earning experience need not be continuous employment.
3. Competence in one Technological Studies area (Communication Technology, Construction Technology, Hospitality Services, Manufacturing Technology, Personal Services, Technological Design and Transportation Technology).

Program Sequencing/Progression
All courses will be offered by the Faculty of Education and Academic Development. Courses will be designed to be meaningful to candidates regardless of their broad-based discipline; assignments, however, will be discipline-specific. The program is offered over 14 months in two 7-week summer institutes with practicum and internship being completed during the intervening Fall/Winter school year.

Program Curriculum Structure
Total courses: Eight courses plus the internship and the practicum.

Candidates will be required to take the following courses:
80-203. Psychology in Education
80-205. Organization and Management in Educational Administration
80-386. Curriculum Development for Technological Studies: Part 1
80-388. Principles and Methods of Teaching Technological Studies: Part 1
80-497. Internship
80-498. Practicum
80-204. Differentiated Instruction for Students with Special Needs
80-207. Introduction to Issues in Education
80-387. Curriculum Development for Technological Studies: Part 2
80-389. Principles and Methods of Teaching Technological Studies: Part 2

Standing Required for Continuation in Program
Candidates who obtain a grade below 50% in any course will be required to withdraw from the program.

Standing Required for Graduation
The Faculty of Education and Academic Development does not issue a teaching certificate. The Ontario Certificate of Qualification is issued by the Ontario College of Teachers upon recommendation of the Dean of the Faculty of Education and Academic Development. Only Canadian citizens or Permanent Residents of Canada qualify for this certificate. Under certain conditions, the Ontario College of Teachers may grant a non-Canadian citizen an Interim Certificate of Qualification. Candidates who obtain three or more final course grades below 65% will not be recommended for certification. Candidates who are unsuccessful in the internship or the practicum will not be recommended for either a diploma/degree or certification.

Concurrent Bachelor of Arts/Bachelor of Education/Diploma in Early Childhood Education - Pre-Service Program
As of Fall 2014, there are no new admissions to this program.

The Concurrent Bachelor of Arts Bachelor of Education/Diploma in Early Childhood Education Program is offered jointly over five years by the Faculty of Arts and Social Sciences, and the Faculty of Education and Academic Development, in co-operation with St. Clair College. The aim is to provide the opportunity and preparation to individuals who wish to teach at the preschool and Primary-Junior levels.
Graduates of this program will receive two degrees and a diploma and will acquire the necessary skills and knowledge to fulfill the requirements for certification by the Ontario College of Teachers.

PROGRAM REQUIREMENTS
All students are required to complete the thirty-course requirement of the University of Windsor General B.A. degree program, in addition to the Education courses 80-203, 80-204, 80-205, 80-209, 80-311, 80-312, 80-313, 80-314, 80-315, 80-316, 80-317, 80-318, and Practice Teaching (80-491, 80-492, 80-493, and 80-494. The St. Clair College Early Childhood Education component will consist of the following courses, ECE 100C, ECE 106C, ECE 117C, ECE 120C, ECE 130C, ECE 209C, ECE 210C, ECE 216C, ECE 230C, ECE 310C, ECE 408C, ECE 409C, ECE 411C, and field placements. Requirements can also be met for teaching in the Roman Catholic school system by taking 80-200.

COURSE SEQUENCE
Course sequencing is subject to change. Contact the Faculty of Education and Academic Development each semester for details.

FIRST YEAR
Fall Term: five B.A. courses
Winter Term: five B.A. courses

SECOND YEAR
Fall Term: four B.A. courses; the B.Ed course 80-203 (Educational Psychology), 80-491 (full-year course)
Winter Term: ECE 100C, ECE 117C, ECE 120C, ECE 130C, ECE 210C, ECE 409C, and ECE 106; 80-491 (full-year course)
Spring Term: two weeks of E.C.E. preschool field placement and two weeks of B.Ed. JK/SK practice teaching (80-491 (full-year course))

THIRD YEAR
Fall Term: three B.A. courses; the B.Ed courses 80-314, and 80-315; 80-492 (full-year course)
Winter Term: three B.A. courses; the B.Ed courses 80-311, 80-313, 80-316 and 80-317; 80-492 (full-year course)
Spring Term: four weeks of B.Ed. Junior grades practice teaching (80-492 (full-year course))

FOURTH YEAR
Fall Term: ECE 209C, ECE 230C, ECE 310C, ECE 408C, ECE 411C, ECE 216C and 4 week field placement; 80-493 (full-year course)
Winter: four B.A. courses; the B.Ed. course 80-204, 80-493 (full-year course)
Spring: four weeks of E.C.E. Infant/Toddler field placement

FIFTH YEAR
Fall Term: three B.A. courses; the B.Ed. courses 80-209; 80-312; 80-318; 80-494

(full-year course)
Winter Term: three B.A. courses; the B.Ed. course 80-205; 80-494 (full-year course)
Spring Term: 4 weeks of B.Ed. Primary grades practice teaching (80-494 (full-year course)

STANDING REQUIRED FOR CONTINUATION
Students must comply with the general university regulations, and with the academic regulations of their particular B.A. program. In addition, candidates who obtain three or more final Education course grades below 65% will not be recommended for certification. Candidates who are unsuccessful in practice teaching or obtain a grade of F in any course will not be recommended for either a degree or certification. Students may repeat only one B.Ed. course, excluding 80-491, 80-492, 80-493, 80-494, for upgrading throughout the program. Any deviation from the prescribed sequence of courses must be approved by the Dean of the Faculty of Education and Academic Development.

GRADUATION
Graduates of the program receive both the Bachelor of Arts and the Bachelor of Education (General) degrees from the University of Windsor, and the Diploma in Early Childhood Education from St. Clair College.
The Faculty of Education and Academic Development does not issue a teaching certificate. The Ontario Certificate of Qualification is issued by the Ontario College of Teachers upon recommendation of the Dean of the Faculty of Education and Academic Development. Only Canadian citizens or Permanent Residents of Canada qualify for this certificate. Under certain conditions, the Ontario College of Teachers may grant a non-Canadian citizen an Interim Certificate of Qualification.

Joint Bachelor of Education/Early Childhood Education Diploma (BEd/ECE)
(Note: As of Fall 2013, there are no new admissions to this program.)

Total courses:
University of Windsor: 12 courses and 12 weeks practicum (6 course equivalents)
Lambton College: 11 courses and 10 weeks practicum

Major requirements:

University of Windsor
The total hours are indicated in parentheses after each course listed.

80-203. Psychology in Education (32)
80-204. Differentiated Instruction for Students with Special Needs (32)
80-205. Educational Foundations, Law and Ethics (32)
80-209. Contemporary Social Issues in Education (16)
80-311. Visual Art Methodology (16)
80-312. Learning with Technologies (16)
80-313. Health and Physical Education Methodology (16)
80-314. Language Arts Methodology (32)
80-315. Mathematics Methodology (32)
80-316. Music Methodology (16)
80-317. Science Methodology (16)80-318. Social Studies Methodology (16)
80-499. Practice Teaching (12 weeks experience in schools, plus associated seminars and professional learning)

Lambton College
ECE Health, Safety and Nutrition
ECE Introduction to ECE and Observation
ECE Developmental Psychology
ECE Infant/Toddler Curriculum
ECE Play (Music, Art, Drama, Movement, Literacy, Construction)
ECE Parent Education (Diversity/Families)
ECE Infant to Preschool Guidance and Assessment
ECE Children with Special Needs (Assessment)
ECE Professionalism (History, Management, Portfolio)
ECE Field Placement and Seminar (10 weeks)

Requirements can also be met for teaching in the Roman Catholic school system by taking 80-200.

Program Sequencing

FIRST YEAR

Fall Term: (BEd)
80-203. Psychology in Education
80-204. Differentiated Instruction for Students with Special Needs – Part 1
80-205. Educational Foundations, Law and Ethics – Part 1
80-209. Contemporary Social Issues in Education
80-311. Visual Art Methodology
80-312. Learning with Technologies - Part 1
80-313. Health and Physical Education Methodology
80-314. Language Arts Methodology – Part 1
80-315. Mathematics Methodology – Part 1
80-316. Music Methodology
80-499. Practice Teaching – Part 1 (2 weeks field placement in JK/SK; 2 weeks in grades 4-6)
Note: Candidates will receive interim grades in Part 1 courses

Winter Term: (ECE)
ECE Health, Safety and Nutrition
ECE Introduction to ECE and Observation
ECE Developmental Psychology I
ECE Infant/Toddler Curriculum
ECE Play (Music, Art, Drama, Movement, Literacy, Construction)
ECE Field Placement and Seminar (2 weeks)

Spring Term: Two weeks of ECE field placement

SECOND YEAR*Fall Term: (ECE)*ECE Developmental Psychology II
ECE Parent Education (Diversity/Families)
ECE Infant to Preschool Guidance and Assessment
ECE Children with Special Needs (Assessment)
ECE Professionalism (History, Management, Portfolio)
ECE Field Placement and Seminar (2 weeks)

*Winter Term: (BEd)*80-204. Differentiated Instruction for Students with Special Needs – Part 2
80-205. Educational Foundations, Law and Ethics – Part 2
80-312. Learning with Technologies - Part 2
80-314. Language Arts Methodology – Part 2
80-315. Mathematics Methodology – Part 2
80-317. Science Methodology
80-318. Social Studies Methodology
80-499. Practice Teaching – Part 2 (2 weeks field placement in JK/SK; 2 weeks in grades 4-6; 4 weeks in grades 1-3)

Spring Term: four weeks of ECE field placement

Additional Program Information for students in the Honours Science/Education programs
Students must enroll in an Honours Degree Program in one of the following disciplines: Biological Sciences, Chemistry or Computer Science. This discipline is designated the first teachable subject. All students must select a second teachable subject (from a different discipline) from either Biological Sciences, Chemistry, Computer Science, Mathematics or Physics and take six (6) courses from the selected subject area which satisfy the major requirements of an Honours degree in the subject area. Students are advised to seek counselling in the appropriate Department or School in the Faculty of Science to ensure that their selection of courses fulfills the requirements for the Honours Science Degree, as well as the requirements for the second teachable subject. In addition, students must take, as part of the requirements for their Honours Science Degree Program, four additional courses from the Arts and Social Sciences chosen from a list provided by the Faculty of Education and Academic Development.

PROGRAM REQUIREMENTS
All students are required to complete the requirements for one of the Bachelor of Science Honours Biological Sciences, Bachelor of Science Honours Chemistry, or Honours Bachelor of Computer Science degree program 40 credits, in addition to the following Education courses:

80-203, 80-204, 80-205
80-330 Topics, 80-332 Instructional Technology, 80-334 Language Across the Curriculum,
80-340 Integrated Theme Project

Plus two options chosen from:
80-331 Visual Art Methodology
80-333 Health and Physical Education Methodology
80-335 Mathematics Methodology
80-336 Music Methodology
80-337 Science Methodology
80-338 Social Studies Methodology
80-339 Guidance and Career Education
Plus two of 80-353, 366 (6.0), 80-373, 80-374, 80-376, or 80-380; and
80-199 *, 80-299 *, 80-399 * and at least sixty days of Practice Teaching 80-499.
Requirements can also be met for teaching in the Roman Catholic school system by taking 80-200.

Other requirements:
(a) Students must maintain a cumulative average of at least 60%, and an average of at least 70% over the courses taken in each of the two teachable areas in order to continue in the Concurrent Program.
(b) Students are expected to enroll in the Concurrent Programs on a full-time basis thereby completing the Honours B.Sc. portion of the program in four years and must take, according to schedule, the required Science and non-Science courses. Students who do not take a selection of courses that lead to the normal completion of all requirements will be required to withdraw from the Concurrent Program. Students who did not follow the regular semester sequence will be required to reapply to the Concurrent Program after an absence of more than one semester.
(c) Students will prepare a learning portfolio to document their experiences in the sequence 80-199, 80-299 and 80-399.
(d) Admission to the Professional Year (Year 5) will be based on successful attainment of the requirements in (a) above and successful review of the Learning Portfolio.

COURSE SEQUENCE
First Year: Ten courses in the Honours Science Program.
Second Year: Ten courses in the Honours Science Program; and the education course 80-199.
Third Year: Ten courses in the Honours Science Program and the education course 80-299.
Fourth Year: Ten courses in the Honours Science Program and the education course 80-399.
Fifth Year (The professional year): 80-203 (4.0), 80-204 (4.0), 80-205 (4.0); 80-330 (1.0), 80-332 (2.0), 80-334 (1.5), 80-340 (1.5) plus two of 80-331 (1.5), 80-333 (1.5), 80-335 (1.5), 80-336 (1.5), 80-337 (1.5), 80-338 (1.5), or 80-339 (1.5); plus two of 80-353 (6.0), 366 (6.0), 80-373 (6.0), 80-374 (6.0), 80-376 (6.0), or 80-380 (6.0); and at least sixty days of Practice Teaching 80-499 (8.0).

EDUCATION AND ACADEMIC DEVELOPMENT: PRE-SERVICE COURSES
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FACULTY OF ENGINEERING

PROGRAMS ADMINISTERED BY THE OFFICE OF THE DEAN OF ENGINEERING
Bachelor of Engineering Technology

FACULTY OF ENGINEERING: **PROGRAM INFORMATION AND REGULATIONS**
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ENGINEERING: **GENERAL COURSES**
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FACULTY OF LAW

PROGRAMS
Juris Doctor (JD) (go to Law Calendar for complete information)
Canadian and American Dual Juris Doctor Program (go to Law Calendar for complete information)
Intellectual Property Law Program (go to Law Calendar for complete information)
JD/MBA Program

Special Lectures

Additonal Information: Law General Information and Admissions Policy
LAW: CALENDAR

Juris Doctor (J.D)

The program leading to the degree of Juris Doctor (J.D) requires full-time attendance for three years, or half-time attendance for six years.

The first year consists of a core of mandatory courses in all of the fundamental areas, problems, and principles of the law, with somewhat more stress upon public law and perspective courses than upon the traditional, first-year law curriculum.

The second and third years allow some variation in course work and research, while including certain common program requirements.

Details of the program, its regulations, and course descriptions are outlined in the separate Faculty of Law Calendar, which may be obtained from the Law Admissions Office.

Canadian and American Dual JD Program

The Canadian and American Dual JD Program is a demanding program of study designed to: educate students to understand the legal doctrines and cultures of both Canada and the United States; help students successfully pass the bar examinations in either country; enable its graduates to practice law in a manner consonant with the highest standards of competence, professional ethics, and concerns for justice as exemplified by the traditions of the legal profession in both countries.

The program requires a student to successfully complete 60 credit hours of course work at the University of Detroit Mercy and 44 credit hours of course work at the University of Windsor. Most mandatory courses require the student to study both US. and Canadian law relevant to the subject area.

This program is designed to enable a student to obtain an American Bar Association-approved Doctor of Jurisprudence (JD) Degree from the University of Detroit Mercy and the nationally recognized Juris Doctor (JD) Degree from the University of Windsor within three calendar years.

Intellectual Property Law Program

The Intellectual Property Law Institute (I.P.L.I.) was created in 1987 through the efforts of the State Bar of Michigan and the law faculties of The University of Detroit Mercy, Wayne State University, and the University of Windsor.

Intellectual property is one of the most innovative, exciting, challenging, and rewarding areas of the law. The I.P.L.I. is dedicated to providing basic and advanced legal education and furthering knowledge, scholarship, and research in the law governing the richly diverse fields of intellectual property: patents, copyrights, trademarks, trade secrets and know-how, computers and related technology, communications and media entertainment, technology transfer, trade regulation, and the arts.

The primary purpose of the I.P.L.I. is to offer an exceptional and rich curriculum for students and lawyers in the field of intellectual property. I.P.L.I. courses have the advantage of sharing the resources of three law schools, as well as the experience and expertise of practicing members of the Michigan Bar Association.

In particular, each course deals with appropriate American and Canadian jurisprudence.

SPECIAL LECTURES

The Access to Justice Lecture Series
Each year a leading scholar is invited to deliver an original lecture on the theme of "Access to Justice". The lecturer then reworks his or her paper for the purpose of publication in The Windsor Yearbook of Access to Justice.

The George M. Duck Lecture Series
A trust fund was established by a donation in memory of George M. Duck in order to institute an annual series of public lectures on the theme "Law in a Changing Society". Annually an eminent scholar will be invited to present the Lecture.

Bernard Cohn Memorial Lecture in Criminal Law
A trust has been established by the friends and family of Bernard Cohn, Q.C. to institute an annual series of public lectures on the theme of Criminal Law and Procedure. Each year an eminent judge, practitioner or scholar will be invited to present the lectures.

Windsor/Wayne Law Forum
The Faculties of Law from the University of Windsor and Wayne State University in Michigan hold an annual lecture series known as the Windsor/Wayne Law Forum. Two professors, one from each institution, examine a given topic from a Canadian and an American perspective. The public is invited to attend these forums. Some of the topics in the series have been "The Role of the Judiciary in a Democratic Society," "Unions, Employees and the Concept of Fair Representation", and "An Introduction to and a Few Perspectives on the Canadian Charter of Rights and Freedoms".

Paul Martin Professorship in International Law
The Paul Martin Endowed Professorship was named for the Hon. Paul Martin, who represented the Windsor area for over thirty-three years, earning distinction in international affairs. The professorship was funded by corporate, private, and government contributions to a campaign launched at the University of Windsor in 1982. The inaugural professor was Secretary-General of the Commonwealth, Sir Shridath Ramphal, followed by Professor Edward McWhinney, then of Simon Fraser University. The 1990 holder was The Hon. Gough Whitlam, former Prime Minister of Australia. In July, 1993, the Hon. Howard Pawley, P.C., Q.C., LL.D., former Premier of Manitoba, began a five-year term as holder of the Chair. Dr. Alice Erh-Soon Tay, Challis Professor of Jurisprudence at the University of Sydney, Australia, and President, Human Rights and Equal Opportunity Commission, was the Paul Martin Professor in 1999.

LAW: SERVICE COURSES

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NURSING

PROGRAMS
Collaborative Four-Year BScN Program

Degree Completion Program:
BScN Program for Graduates of the Lambton College Practical Nursing Program

Additional Information: Mission Statement, Philosophy and Program Outcomes
Admission Requirements and Program Regulations
GENERAL UNDERGRADUATE REGULATIONS

Collaborative Four-Year B.Sc.N Program

This program is four years in length and is designed for individuals who are seeking to prepare for a career in nursing at the baccalaureate level.

The curriculum is designed on the premise that professional nursing is multidisciplinary in nature, applying nursing, biological and social sciences, as well as the arts, to the care of individuals, families and communities. As inquiring, caring, competent practitioners, nurses serve the needs of society through health promotion, health maintenance, prevention of disease and care of the sick and dying.

The Faculty of Nursing programs are approved and accredited. National Accreditation was granted in 1998 by the Board of Accreditation, Canadian Association of Schools of Nursing (CASN). The collaborative program was granted candidacy status by the Board of Accreditation of CASN in 2004. In 2011, CASN Accreditation Bureau granted the University of Windsor, Lambton College and St. Clair College Collaborative Nursing Program a 7-year term in response to the on-site review that took place in September 2010.

Upon successful completion of the program, students are eligible to write nurse registration examinations and pursue graduate studies.

Total courses:: 43.

Major requirements:
63-171, 63-172, 63-166 , 63-173, 63-174, 63-175, 63-176, 63-177, 63-271, 63-272, 63-273, 63-274, 63-275, 63-277, 63-278 (double-weighted), 63-279, 63-371, 63-372, 63-373, 63-374, 63-375, 63-377, 63-378, 63-389, 63-391, 63-472* (double-weighted), 63-473*, 63-476 (double-weighted), 63-479*, 63-481*(double-weighted).

Other requirements:
02-02-250 or 03- 65-205, 02-46-115, 03-55-237, 03-55-351, 03-59-191; One Nursing Option (taken from nursing option electives offered), One Arts Option and Two Open Options.

Recommended options (if any):
Nursing option electives (offered on a rotating basis)
63-241. Health Issues and Care of Diverse Populations
63-351. The Human Meaning of Death
63-399. Selected Topics in Nursing

COURSE SEQUENCE

YEAR ONE

Fall
63-171. Introduction to Nursing I
63-172. Clinical Nursing Experience
46-115. Introduction to Psychology as a Behavioural Science
63-166. Health Assessment I
63-175. Anatomy and Physiology I

Winter
63-173. Introduction to Nursing II
63-174. Clinical Nursing Experience
59-191. Organic and Biological Chemistry for Health Sciences
63-176. Health Assessment II
63-177. Anatomy and Physiology II

YEAR TWO

Fall
63-271. Family Health
63-272. Clinical Nursing Experience
63-273. Nursing Care of Clients with Episodic and Long-Term Health Needs
55-237. Introductory Microbiology
63-279. Pharmacology in Nursing Practice

Winter
63-274. Clinical Nursing Experience
63-275. Family Health: Child Bearing and Child Rearing Families
63-277. Nursing Care of Children and Youth with Episodic and Long-Term Health Needs
55-351. Medical Microbiology
02-250. Basic Quantitative Methods in Social Science; or, 65-205. Statistics for the Sciences
Open option

Intersession/Summer
63-278. Clinical Nursing Experience (4 weeks) (160 hours)

YEAR THREE

Fall
63-371. Families Experiencing Crises
63-372. Clinical Nursing Experience
63-373. Nursing Care of Clients with Complex Health Problems I
63-377. Nursing Research
63-391. Basic Human Nutrition

Winter
63-374. Clinical Nursing Experience
63-375. Nursing Care of Clients with Complex Health Problems II
63-389. Community as a Client.
One Nursing Option (*Contact the Faculty of Nursing for a list of approved Nursing options.)*
One Arts option
One Open option

Intersession
63-378. Clinical Nursing Experience (2 weeks) (80 hours)

YEAR FOUR

Fall
63-472. Clinical Nursing Experience*; or, 63-476.Clinical Nursing Experience
63-473. Concepts of Leadership in Nursing Practice *
63-479. Global Health Issues in Nursing *

Winter
63-472. Clinical Nursing Experience*; or, 63-476.Clinical Nursing Experience
63-481. Transition to Professional Practice

**May be offered as half-semester (6 week) or full-semester (12 week) courses. Lecture hours per week will vary based on whether the course is offered as a half- or full-semester course.*

BScN Program for Graduates of the Lambton College Practical Nursing Program - Degree Completion Program
Qualified students will be given one year of credit for their previously completed two-year diploma in Practical Nursing that includes all relevant clinical experiences. Each student who enters the program will complete accredited courses from years one and two of the collaborative nursing program on the Lambton College site. The courses that have been selected bridge the gap

between what was previously studied and what needs to be completed to enter year three at the University of Windsor to complete the BScN.

Total courses: The students entering into the program at Lambton College will receive credit for 10 courses towards the BScN. They will complete an additional 12 courses at Lambton College that are a combination of year one and year two collaborative nursing course requirements.

The Registered Practical Nurse Pathway will include the Major Requirements of: 63-171, 63-172, 63-176, 63-271, 63-279, 63-275, 63-278 (double-weighted), 63-279, 63-371, 63-372, 63-373, 63-374, 63-375, 63-377, 63-378, 63-389, 63-391, 63-472* (double-weighted), 63-473*, 63-476 (double-weighted), 63-479*, 63-481* (double-weighted).

Other requirements: 03-59-191, 03-55-237, 03-55-351, 03-65-205 or 02-02-250, one Nursing Option, one Arts Option and Two Open Options.

**May be offered as half-semester (6 week) or full-semester (12 week) courses. Lecture hours per week will vary based on whether the course is offered as a half- or full-semester course.*

COURSE SEQUENCE

YEAR ONE – Fall and Winter [Lambton site]

Students who come to the University of Windsor at the end of the year at Lambton will enter year three of the collaborative BScN.

YEAR THREE

Fall [University of Windsor]
63-371 Families Experiencing Crises
63-372 Clinical Nursing Experience
63-373 Nursing Care of Clients with Complex Health Problems I
63-377 Nursing Research
63-391 Basic Human Nutrition

Winter [University of Windsor]
63-374 Clinical Nursing Experience
63-375 Nursing Care of Clients with Complex Health Problems II
63-389 Community as Client
63-xxx Nursing Option
Arts option
Open option

Intersession
63-378 Clinical Nursing Experience

Note: All option courses must be completed prior to entering year four of the program.

YEAR FOUR

Fall [University of Windsor]
63-472 Clinical Nursing Experience – Hospital or 63-476 Clinical Nursing Experience – Community
63-473 Concepts of Leadership in Nursing Practice
63-479 Issues in Global Health

Winter [University of Windsor]
63-472 Clinical Nursing Experience – Hospital or 63-476 Clinical Nursing Experience – Community
63-481Transition to Professional Practice

Note: If 472 is taken in the Fall term, then 63-476 is taken in the Winter term. If 63-476 is taken in the Fall term, then 63-472 is taken in the Winter term.

NURSING: COURSES
NURSING: GRADUATE PROGRAMS

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FACULTY OF SCIENCE

Students are directed to become familiar and to comply with the general regulations of the University which apply to all students. Additionally, the Faculty, and individual programs within the Faculty of Science may have particular regulations. Students enrolled in programs in the Faculty of Science also must comply with these particular requirements which may be found in the program sections of the Faculty. We strongly encourage students to seek counselling in the Departments or in the Faculty of Science Office to clarify the requirements of their particular degree programs. Students also are directed to read the "Statement of Responsibility", the "Important Dates", the Policy on Plagiarism, and the Policy on Unacceptable Use of Computer Resources (See "Undergraduate Regulations").

PROGRAMS ADMINISTERED BY THE OFFICE OF THE DEAN OF SCIENCE
Bachelor of Science (General Science)

GENERAL INFORMATION ABOUT SCIENCE PROGRAMS
General Information about Bachelor of Science General Programs
General Information about Bachelor of Science Honours Programs
General Information about BSc Honours with Thesis Programs
General Information about Bachelor of Computer Science Programs
General Information about Bachelor of Arts in Economics
General Information about Bachelor of Science in Economics
General Information about Bachelor of Mathematics

ADDITIONAL INFORMATION
Co-operative Education Programs in Science
Pre-medical and other pre-professional programs

GENERAL UNDERGRADUATE REGULATIONS

Bachelor of Science General Programs
The Bachelor of Science (General Science) requires the completion of thirty courses.

Bachelor of Science Honours Programs
Programs leading to an Honours B.Sc. require the completion of forty courses. Specific requirements differ depending upon the Honours Major(s). Course selection may provide for further specialization in a single subject or in a combination of related subjects. Students who achieve a major average of 70% or higher will receive the Honours degree.

The following programs are offered:

Biological Sciences - Honours Biological Sciences, Honours Biology and Biotechnology.
Chemistry and Biochemistry - Honours Biochemistry, Honours Chemistry, Honours Chemistry and Physics.
Computer Science - Honours Computer Information Systems, Co-operative Education program in Honours Computer Information Systems, Honours Applied Computing, Honours Computer Science with option in Software Engineering (with and without Co-op).
Earth Sciences and Environmental Sciences - Honours Environmental Science (with or without thesis)
Physics - Honours Physics, Honours Physics (Physics and High Technology), Honours Physics (Medical Physics) - All physics programs are with/without thesis and with/without co-op option; plus combined Honours programs in Physics and Computer Science and in Chemistry and Physics.

BSc Honours with Thesis Programs
Programs leading to an Honours B.Sc. with Thesis require the completion of forty courses, of which two course credits would result in a thesis in the final year of study. Honours standing (major average of 70% or higher) is required for graduation in all B.Sc. with Thesis programs. In any program some degree of specialization is possible; course selection may provide for further specialization in

a single subject or in a combination of related subjects.

Bachelor of Computer Science Programs
Computer Science - Both general and honours programs are offered, leading to the degree of Bachelor of Computer Science (B.C.S.). Each permits the student to augment a specialized study of computers with an
extensive study of one of a number of related fields, or with a broad spectrum of other courses. A Co-operative Education program is offered in Honours Computer Science. Also offered are B.Sc. programs leading to degrees in Computer Information Systems Specialization, or with Software Engineering Specialization.

Bachelor of Arts in Economics
Economics - Both general and honours programs are offered leading to the Bachelor of Arts degree in Economics. Combined degrees are also available.

Bachelor of Science in Economics
Economics - Honours program leading to the Bachelor of Science degree in Economics.

Bachelor of Mathematics
Mathematics and Statistics - Both general and honours programs lead to the Bachelor of Mathematics (B.Math.) degree. Mathematics also may be combined with Computer Science or another major leading to the Honours B.Math. degree.

ADDITIONAL INFORMATION

Cooperative Education Programs

The Co-operative Education Program offers students the opportunity to combine their classroom experiences with related work experiences. Students seeking admission to the co-operative Education Program must be admitted to the Faculty of Science and enrolled as a full-time student. The Faculty of Science offers the following Co-op programs:

Computer Science:
Bachelor of Computer Science (Honours)
Bachelor of Science (Honours Computer Information Systems)
Bachelor of Science (Honours Computer Science with Software Engineering Specialization)

Physics:
Bachelor of Science in Physics
Bachelor of Science in Physics (Physics and High Technology)
Bachelor of Science in Physics (Medical Physics)

ADMISSION AND APPLICATION
Students can apply for admission to the co-op program in high school and in September during the second year of study. Students applying for Co-op during their second year of study will be required to submit an application form and a resume. Second year admission will be based on academic achievement, previous volunteer and paid work experience, and in some cases, an interview.

NOTE: Each Co-op program within the Faculty of Science has particular regulations and guidelines. Students are directed to the program sections of the Faculty.

Pre-medical and Pre-professional Programs

In addition to the degree programs, the Faculty of Science offers combinations of course selections for students intending to apply to professional schools such as medicine, dentistry, optometry, pharmacy, physiotherapy, alternative medicine, chiropractic, radiation therapy, etc. All students intending to apply for admission to a professional school are advised to study carefully the requirements of the particular school)s) to which admission is sought because there is some variation, both with respect to choice of subjects and number of years of study required for entrance. Institutions may also change their requirements from time to time.

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ACADEMIC REGULATIONS

Students are responsible for becoming familiar and complying with the general regulations of the University as contained in this section. Additionally, students must be familiar and comply with the regulations of the Faculty in which they are enrolled. These particular requirements may be found in the program sections of this calendar.

Students also are directed to read the *Statement of Responsibility*, and the calendar of important dates and deadlines under *Academic Dates*.

ACADEMIC ADVISING
CLASSIFICATION OF STUDENTS (definitions for full-time/part-time student, audit student, academic probation, *etc.*)
COMBINED MAJOR (majoring in two subject areas)
COURSE CONTENT
COURSE NUMBERING SYSTEM AND FACULTY AND PROGRAM CODES
DEFINITION OF COURSES AND SESSIONS
OPTIONS (courses in subjects other than the major subject)
TRANSFERRING TO ANOTHER PROGRAM

ADDITIONAL DEGREES
ADVANCED STANDING AND CREDIT TRANSFER (advanced standing and transfer credits reduce the total number of courses a student must complete for a degree)
CERTIFICATE PROGRAMS
COURSE EQUIVALENCY POLICY (permission to substitute one course for another)
COURSE OVERLOAD POLICY (course taken in addition to the prescribed semester or term load)
INTRODUCTORY STATISTICS COURSES
LETTERS OF PERMISSION (permission to take courses at another university for credit towards their UWindsor degree)
MINOR (provides a general knowledge of an area of study)
RESIDENCY REQUIREMENTS (the number of courses that must be completed at the University of Windsor)
REPETITION OF COURSES
SENIOR-LEVEL COURSE REQUIREMENTS (minimum number of courses to be completed at the 200-level or above)
STANDING REQUIRED FOR CONTINUATION IN PROGRAMS AND FOR GRADUATION (minimum major and cumulative averages required to continue in a program of study and to graduate)

ACADEMIC ADVISING

The responsibility for becoming familiar and complying with the requirements for degrees and with academic regulations rests primarily with the student. Every student can access a "Degree Audit Report" on the Student Self Service page at https://my.uwindsor.ca which reports a student's progress towards fulfilling degree requirements.

In addition, academic advising is strongly recommended for all students. Academic units provide individual assistance to students both in the selection of their programs of studies and in the choice of courses in keeping with program requirements. General questions normally should be addressed to the Associate Dean of the Faculty.

Students are strongly urged to seek course and program advising to ensure that they understand degree requirements. It is recognized that many students may not have decided on their major areas or on their final career goals prior to entering University. Consequently, it is not unusual for students to change their programs of study after taking several courses. Every effort is made to assist such students, within the limits of the requirements of the various programs.

Students who are considering program changes may request assistance from advisors within their proposed area of study. Application forms for a change of program are available on the web on the Student Self Service page at

https://my.uwindsor.ca.

Students are required to have declared a major by the time they have successfully completed ten semester courses.

CLASSIFICATION OF STUDENTS
A full-time student is one who is registered in four or more undergraduate courses in a term.

A part-time student is one who is registered in fewer than four undergraduate courses in a term.

A regular student is one who has met the average requirements for admission or the minimum average requirements for continuation in his or her program of studies.

A conditioned student is one who, at the time of admission, does not have standing in a required subject or subjects.

A visiting student is one who registers and takes courses for credit for the purpose of transferring the credit to the university at which he or she was previously registered. Normally, visiting students are advised to have written permission from the home university in order to register for courses.

A special or non-degree student is one who is taking courses for credit but not proceeding to a degree at this University.

An audit student is one who attends (a) course(s) but does not receive any grade(s) or credit for the course(s) towards a degree. Such a student will not be allowed to write examinations and may not be graded in any way, but will be required to pay the regular fees for the course(s).

A student on academic probation is one who has not met the full admission requirements to a program or a student who, once admitted, has shown unsatisfactory progress at the conclusion of the previous term. (See the regulations pertaining to each Faculty.)

Academic probation is removed if a student demonstrates satisfactory progress by the end of the probationary period. Normally, a student will be required to withdraw from a faculty if performance is not satisfactory at the conclusion of the academic probationary period.

For regulations pertaining to the possible readmission of students who have been required to withdraw, see the regulations pertaining to each Faculty.

COMBINED MAJOR

Students wishing to combine two areas of study from the Arts, Languages, Social Sciences, or Science within a single four-year Honours B.A. or B.Sc. program may do so if the areas of study concerned have provided for this possibility in their respective sections of the Calendar. Such programs require a total of forty courses including the successful completion of the major requirements and specified other requirements as defined by each area of study in the appropriate section of the calendar. The area of study selected as the first major will determine the degree awarded. (*e.g.,* BA in English and Chemistry, or BSc in Chemistry and English).

COURSE CONTENT

Information regarding the content and the hours of instruction per week for all courses is to be found in the individual subject area listings. The time schedule for classes can be obtained online at www.uwindsor.ca/registrar/timetable.

The University does not attempt to impose uniformity in methods of course presentation. Therefore, methods of course presentation vary and may involve lectures, lectures combined with class discussion, small group or tutorial instruction, seminars, or other combinations of the above. In all cases, the method(s) to be used will be explained early in the course.

COURSE NUMBERING SYSTEM AND FACULTY AND PROGRAM CODES

Each course is identified by a three-part number. The first part refers to the

Faculty, the second part to the subject area, the third to the level of the course. Thus, the course 02-46-220 would be a course in the Faculty of Arts, Humanities and Social Sciences (02-), in the subject area of Psychology (46-) and would be at a level that places it among courses in the 200 series. The series 100, 200, 300, and 400 numbers are intended to indicate progressively more demanding content and correspondingly increasing background and competence on the part of the students enrolled in the course.

Numbers in the range 100-199 are ordinarily used for the introductory courses in most disciplines. Within the range, however, a lower number does not necessarily signify more elementary content. It is important that students planning their courses have clearly in mind the significance of these numbers so that they may guard against undertaking course work at levels for which they are insufficiently prepared. A number of courses have stated prerequisites which are prior requirements for entry to a course. Students who do not satisfy the prerequisite for a course, or who in the opinion of the instructor do not possess an equivalent background to that of the stated prerequisite, may not register for the course, and may be removed if they register inappropriately.

Faculty of Arts, Humanities and Social Sciences	01- (Arts)/02- (Social Sciences)
Faculty of Science	03-
Faculty of Business Administration	04-
Faculty of Education and Academic Development	05-
Faculty of Engineering	06-
Faculty of Human Kinetics	07-
Faculty of Law	08-
Faculty of Nursing	11-
Inter-Faculty Programs	14-

Program/Course Codes
Note: The Program/Course codes are preceded by the relevant Faculty code.

Arts and Science, 14-56-
Additional Qualification Courses, 05-79-
Biology, 03-55-
Business Administration:

- Accounting, 04-70-
- Business Strategy and Entrepreneurship, 04-75-
- Finance, 04-72-
- Management and Labour Studies, 04-71-
- Management Science, 04-73-
- Marketing, 04-74-

Chemistry and Biochemistry, 03-59-
Civil and Environmental Engineering:

- Civil, 06-87-
- Environmental, 06-93-

Languages, Literatures and Cultures:

- Aboriginal Studies, 01-06-
- Inter cultural Studies, 01-07-
- Asian Studies, 01-10-
- Greek and Roman Studies, 01-11-
- Greek & Roman History, 01-12
- Greek Language & Literature, 01-13-
- Latin Language & Literature, 01-14-
- German, 01-15-
- Italian, 01-21-
- Spanish, 01-23-

Communication, Media, and Film: 02-40-
Forensics, 14-57-
French Studies, 01-29-
General Engineering, 06-85-
Geography: 02-42-
History, 02-43-
Industrial and Manufacturing Systems Engineering, 06-91-
Inter-Faculty, 14-51-
Kinesiology, 07-95-
Labour Studies: 02-54-
Law service courses, 08-99-
Law courses, 08-98-
Mathematics and Statistics:

- Mathematics, 03-62-
- Statistics, 03-65-

Mechanical, Automotive, and Materials Engineering:

- Mechanical, 06-92-
- Automotive, 06-94-
- Materials, 06-89-

Music:

- Music Academic Studies, 01-32-
- Music Performance Studies, 01-33-

Nursing, 11-63-
Philosophy: 01-34-
Physics, 03-64-
Political Science: 02-45-
Psychology: 02-46-
Social Justice: 02-38-
Social Work: 02-47-
Sociology, Anthropology, and

Computer Science, 03-60-
Diaspora Studies, 02-45-
Digital Journalism, 02-30-
Disability Studies, 02-37-
Dramatic Art: 01-24-
Earth Sciences:

Environmental Science, 03-66-

Economics, 03-41-
Education, 05-80-
Electrical and Computer Engineering, 06-88-
English, 01-26-
Environmental Studies, 14-58-

Criminology:

Sociology, Criminology, 02-48-
Anthropology, 02-49-
Planning, 02-50

Visual Arts:

Visual Arts, 01-27-
Art History, 01-28-
Film/Production Courses, 01-39-

Women's Studies, 02-53-

DEFINITION OF COURSES AND SESSIONS

The word "course" generally refers to a 3.00 credit hour offering which is given over one term. Each term includes approximately twelve weeks of classes. During each regular academic year (September to April), the Fall term runs from early September to early December and the Winter term runs from early January to mid-April. Each term concludes with final examinations. Additionally, the University schedules courses in a Summer term which includes Intersession (May - June) and Summer Session (July - August), each of which are approximately six weeks in duration. Courses given in these sessions carry the same credit as those in the Fall and Winter terms. Some courses offered in the Summer Term run from May - August (12 weeks).

In some areas, courses also may be offered for 1.50 credit hours, or for 6.00 credit hours. Courses of any credit hour value may be offered over multiple terms or over a part of a term.

In a few cases a course may be "linked" with another course in the sense that credit is granted only when both courses have been completed successfully. Course descriptions indicate "linked" courses. Unless otherwise indicated, such courses must be taken in successive terms.

The time required to complete programs can vary according to the student's choice. If courses are taken exclusively in the Fall and Winter terms, a general degree normally is completed in three years and a four-year Honours, Major or professional degree in four years of full-time study. Students may choose to accelerate their programs by attending Summer term, Intersession and/or Summer Session, or may spread their programs over a longer period by attending as part-time students. Some programs place a time limit on degree completion. Refer to individual Faculty and program regulations for such limits.

OPTIONS

Options are courses in subjects other than the major subject(s). For the purpose of meeting option requirements the University categorizes its courses as follows:

ARTS(In addition, all Language courses can satisfy Arts options)
Art History
Greek and Roman Studies
Dramatic Art
English and Creative Writing
General Courses, Faculty of Arts, Humanities and Social Sciences (01/02)
Intercultural Studies
Music-Academic Studies
Music-Performance Studies
Philosophy
Visual Arts
Women's Studies*
*The following Women's Studies courses may be taken for Arts credit: 53-106, 53-120, 53-130, 53-230, 53-240, 53-250, 53-236, 53-270, 53-300, 53-335, and 53-345.
The following Inter-Faculty course may be taken for Arts credit: 51-160.

LANGUAGES

Arabic
French
German
Ancient Greek
Italian
Japanese
Latin
Spanish
Hebrew

*Note:*Courses in all languages listed above that may be used to satisfy language option requirements include: xx-100, xx-101, xx-102, xx-200, xx-201, xx-202. xx-300, xx-301. All French Studies courses count as language option requirements. 08-110 and 08-111 (formerly 07-110 and 07-111) also count as language option requirements. All other courses in any language listed above count only as Arts options.

SOCIAL SCIENCES
Anthropology
Communication Studies
Economics***
General Courses, Faculty of Arts, Humanities and Social Sciences (02)
Human Geography (42-)
History
Labour Studies
Planning
Political Science
Psychology
Social Work
Sociology
Women's Studies**
** (53-106, 53-120, 53-130, 53-230, 53-240, 53-250, 53-270, 53-300, and 53-345 can satisfy either a Social Science or an Arts option requirement.)
***All Economics courses will be permitted to satisfy either science or social science options.
The following Inter-Faculty and Environmental Studies courses may be taken for Social Science credit: 51-160, 58-110 and 58-210.

SCIENCE
Biology
Biochemistry
Chemistry
Computer Science
Economics***
Environmental Science
General Courses, Faculty of Science (03)
Geology
Mathematics
Physical Geography (67-)
Physics
Statistics
Women's Studies**

** Women's Studies 53-220 will satisfy either a Social Science or a Science option requirement.
***All Economics courses will be permitted to satisfy either science or social science options.

Note: For students in the Faculty of Arts, Humanities and Social Sciences the following Nursing courses will satisfy a Science option requirement: 63-241, 63-245, 63-351, and 63-391.

PROFESSIONAL
Business Administration
Education
Engineering
Kinesiology
Law
Nursing

PROGRAM TRANSFERS (Transfering to Another Program)

A student who wishes to transfer to a new program may apply on the web on the Student Self Service page at https://my.uwindsor.ca. All program transfers and conditions for transfer are subject to the approval of the Dean in accordance with regulations established by the Faculty into which the student wishes to transfer.

1) Normally a student who has a cumulative average of 60% or greater in the previous program, and who meets the admission requirements of the intended program will be permitted to transfer. Transfer credit will be assessed and awarded in accordance with the Senate Policy on Advanced Standing and Credit Transfer.

2) If a student has been required to withdraw from a program, the student normally will be considered for admission to the new intended program on the same basis as students who have been required to withdraw from the program.

3) All courses that are transferable, whether passed or failed, will be considered in calculating both the cumulative and major averages (where appropriate) in the new program.

4) Applications for transfer to Business are subject to the following deadlines:

- June 15th for Fall semesters
- October 15th for Winter semesters
- February 15th for Inter/Summer semesters

Transfer is based on academic achievement and the availability of space, and a minimum 67% cumulative average is required in order to be considered for a transfer to Business.

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SOCIOLOGY, ANTHROPOLOGY AND CRIMINOLOGY

PROGRAMS

ANTHROPOLOGY
General Anthropology *(Note: As of Fall 2014, there are no new admissions to this program.)*
Honours Anthropology *(Note: As of Fall 2013, there are no new admissions to the program.)*
Combined Honours Anthropology Program *(Note: As of Fall 2013, there are no new admissions to the program.)*
Minor in Anthropology
Major and Minor Concentrations - Bachelor of Arts and Science: Anthropology

SOCIOLOGY
General Sociology
Honours Sociology
Combined Honours Sociology Programs
Minor in Sociology
Major and Minor Concentrations - Bachelor of Arts and Science: Sociology

CRIMINOLOGY
Honours Criminology
Combined Honours Criminology Programs
Minor in Forensic and Cultural Anthropology
Major and Minor Concentrations - Bachelor of Arts and Science: Criminology

FAMILY AND SOCIAL RELATIONS
General Family and Social Relations
Honours Family and Social Relations
Combined Honours Family and Social Relations
Minor in Family and Social Relations

Minor in Studies of Sexuality

Additional Information: Sociology Program Information
GENERAL UNDERGRADUATE REGULATIONS

ANTHROPOLOGY

General Anthropology

Total courses: thirty.

Major requirements: twelve courses, including 48-111/48-111, 48-112/49-112, four 200-level courses in Anthropology, and six additional Anthropology courses. At least four Anthropology
courses must be at the 300 level or above.

Option requirements:
(a) two courses from Arts
(b) two courses from Languages or Science;
(c) two courses from any areas of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) four courses from any area of study, including Anthropology and any Sociology (48-) courses which are cross-listed with Anthropology;
(c) six courses from any area of study, excluding Anthropology and any Sociology (48-) courses which are cross-listed with Anthropology.

Honours Anthropology
(Note: As of Fall 2013, there are no new admissions to this program.)

Major Requirements: sixteen courses, as given below:
(a) 48-111, 48-112, 48-213, 48-390, 48-356, 48-415

(b) One of 48-214 or 48-215
(c) Four additional courses from the following: 48-323,48-330,48-336,48-339,48-340,48-352,48-375
(d) One of 48-419 or 48-412
(e) Four other courses in Anthropology

Option Requirements:
(a) two courses from Arts
(b) two courses from Languages or Science
(c) two courses from any area of study outside Social Science

Other requirements:
(a) 01-150, 01-151;
(b) 02-250;
(c) seven courses from any area of study, including Anthropology and any Sociology courses that are cross-listed with Anthropology;
(d) eight courses from any area of study, excluding Anthropology and any Sociology courses that are cross-listed with Anthropology.

Note: Anthropology Honours students interested in graduate studies in Sociology should include the following courses in their program: 48-302, 48-308, plus one course from 48-403, 48-405, or its equivalent.

Combined Honours Anthropology Programs
(Note: As of Fall 2013, there are no new admissions to this program.)

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Major Requirements: twelve courses, as given below:
(a) 48-111, 48-112, 48-213, 48-390, 48-356, 48-415 plus either 48-419 or 48- 412; plus five other Anthropology courses at the 200 level or above.

Other subject: as prescribed by the other major

Option Requirements:
(a) two courses from Arts
(b) two courses from Languages or Science
(c) two courses from any area of study outside Social Science

Other requirements:
(a) 01-150, 01-151:
(b) 02-250;
(c) additional options (if required) to a total of forty.

Minor in Anthropology

Required: six Anthropology courses, including 48-111, 48-112; at least one of 48-213 or 48-215; and one of 48-356, 48-390 or 48-323; one of 48-415,48-412, or 48-419.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS) - Anthropology

Major Concentration: 48-111; 48-112; four 200-level courses; 48-356; three 300-level courses; two other 400-level courses.

Minor Concentration: 48-111; 48-112; one 200-level course; and three other Anthropology courses at the 3rd year or above.

SOCIOLOGY

Sociology Program Information

The study of sociology is an opportunity to learn about the many aspects of social

relations, ranging from face-to-face, intimate and family relationships, to those among such social groups as households, genders, classes, movements, race and ethnic groups, unions, corporations, and governments, as well as industrial and developing societies. The faculty have particular strengths in researching social justice issues concerning AIDS, crime, occupational health, decline of family farms, First Nations, third world development, health care, employment equity, prison reform, sex work, gay and lesbian communities, immigrant workers, and Latin America and the Middle East. Please note in particular the following course sequences:

Criminology: 48-260, 48-261, 48-262, 48-361, 48-362, 48-363, 48-367, 48-368, 48-370, 48-371, 48-373, 48-460, 48-461, 48-464, 48-465, 48-467.
Family, Sex, and Gender: 48-204, 48-205, 48-214, 48-251, 48-306, 48-329, 48-450, 48-351, 48-352, 48-354, 48-409, 48-461.
International Development: 48-112, 48-227, 48-321, 48-325, 48-327, 48-332, 48-340, 48-352, 48-411.
Race and Ethnic Relations: 48-232, 48-240, 48-333, 48-422.
Work: 48-225, 48-228, 48-326, 48-332.

General Sociology

Total courses: thirty.

Major requirements: ten courses, including, 48-110, 48-291, 48-290, two of 48-204, 48-205, 48-213, 48-225, 48-227, 48-228, 48-240, 48-251, 48-327, 48-333, 48-339, 48-351, 48-352, 48-353, 48-354; 48-391, and 48-390; plus three additional Sociology (48-) courses at the 300 or 400 level.

Option requirements:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) six courses from any area of study, including Sociology (48-);
(c) six courses from any area of study, excluding Sociology (48-) and any Anthropology courses cross-listed with Sociology.

Honours Sociology

Total courses: forty.

Major requirements: fifteen courses, including 48-110; 48-291, 48-290, four of 48-204, 48-205, 48-213, 48-225, 48-227, 48-228, 48-240, 48-251, 48-327, 48-333, 48-339, 48-351, 48-352, 48-353, 48-354; 48-391, 48-308, and 48-390; two 400-level courses; three additional Sociology (48-) courses at the 300 or 400 level.

Option requirements:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) 02-250;
(c) seven courses from Arts, Languages, or Social Sciences, including Sociology (48-);
(d) nine courses from any area of study, excluding Sociology (48-) and any Anthropology courses cross-listed with Sociology.

Combined Honours Sociology Programs
(Not available for a Combined Honours degree with Criminology)

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements - Sociology fifteen courses, including 48-110; 48-291, 48-290, four of 48-204, 48-205, 48-213, 48-225, 48-227, 48-228, 48-240, 48-251, 48-327, 48-333, 48-339, 48-351, 48-352, 48-353, 48-354; 48-391, 48-308, and 48-390; two 400-level courses; three additional Sociology (48-) courses at the 300 or 400 level. An equivalent statistics course may be substituted for 48-308, in which case one additional Sociology or Anthropology course is required.

Major requirements - Other Subject: as prescribed by that area of study.

Option requirements:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) 02-250 (or equivalent);
(c) additional courses from any area of study to a total of forty courses.

Minor in Sociology

Required: six Sociology courses, including 48-110 and five courses at the 200 level or above.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS) - Sociology

Major Concentration 48-110; 48-291; 02-250; 48-290; 48-391; 48-390; three 300-level or above courses; two 400-level courses.

Minor Concentration: 48-110; plus two additional 200-level course; three courses at the 300-level or above.

Notes:
1. Students are encouraged to closely review prerequisites for other Sociology courses to ensure appropriate planning of their program of study.
2. Students interested in taking Criminology courses in years three and four will need to have the criminology prerequisites 48-260 and 48-262.

CRIMINOLOGY

Honours Criminology

Total courses: forty

Major requirements: fifteen courses, including:
(a) 48-110, 48-291, 48-290, 48-260, 48-262, 48-308, 48-390;
(b) two of 48-213, 48-227, 48-240, 48-251, 48-327, 48-333, 48-339, 48-351, 48-352, 48-353, 48-354;
(c) 48-391 or 48-373;
(d) three of 48-361, 48-362, 48-363, 48-365, 48-367, 48-368, 48-370, 48-350, 48-374, 48-382, and 48-371;
(e) two 400-level courses, including one of 48-421, 48-451, 48-491, 48-460, 48-461, 48-464, 48-465, 48-467

Options:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) 02-250;
(c) seven courses from Arts, Languages, Social Sciences, including Sociology
(d) nine courses from any area of study, excluding Sociology and any Anthropology courses cross-listed with Sociology.

Recommended Courses:
Anthropology: 48-323
History: 43-124, 43-218, 43-244, 43-247, 43-250, 43-251, 43-247
Labour Studies: 54-100, 54-200
Philosophy: 34-221, 34-129, 34-226

Political Science: 45-100, 45-130, 45-160, 45-210, 45-211, 45-213, 45-214, 45-221, 45-267, 45-268, 45-309, 45-313, 45-314, 45-321
Psychology: 46-115, 46-116, 46-220, 46-223, 46-224, 46-236, 46-333, 46-322, 46-330, 46-228
Women Studies: 53-100, 53-202, 53-270, 53-310, 53-330

Notes:
1) Students interested in government service should include French language courses among their options; other non-English language courses also are recommended.

Combined Honours Criminology Programs
(Not available for a Combined Honours degree with Sociology)

An Honours Criminology Degree can be combined with a specialization in another subject (*e.g.*, psychology, political science, *etc.*).

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements - Criminology: fifteen including
(a) 48-110, 48-291, 48-290, 48-260, 48-262, 48-308, 48-390;
(b) two of 48-213, 48-227, 48-240, 48-251, 48-327, 48-333, 48-339, 48-351, 48-352, 48-353, 48-354;
(c) 48-373 or 48-391;
(d) three of 48-361, 48-362, 48-363, 48-365, 48-367, 48-368, 48-370, 48-350, 48-374, 48-382, and 48-371;
(e) two 400-level courses, including one of 48-421, 48-451, 48-491, 48-460, 48-461, 48-464, 48-465, 48-467

Major requirements--Other Area of Study: as prescribed by that area of study.

Option requirements:
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) 02-250;
(c) additional courses from any area of study to a total of forty courses.

Notes:
1) Students interested in government service should include French language courses among their options; other non-English language courses also are recommended.
2) Students are encouraged to closely review prerequisites for other courses to ensure appropriate planning of their program of study.

Minor in Forensic and Cultural Anthropology

Required: 48-213; 48-215; 48-323, 48--338; 48-415; and one of 48-214, 48-336, 48-340, 48-354.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS) - Criminology

Major Concentration: 48-110; two of 48-213, 48-227, 48-240, 48-251, 48-327, 48-333, 48-339, 48-351, 48-352, 48-353, 48-354; 48-291; 48-290; 48-260; 48-262; 48-390; 48-373 or 48-391; three of 48-361, 48-362, 48-363, 48-365, 48-367, 48-368, 48-370, 48-350, 48-374, 48-382, and 48-371; two 400-level courses, including one of 48-421, 48-451, 48-491, 48-460, 48-461, 48-464, 48-465, 48-467.

Minor Concentration: No Minor Concentration offered.

FAMILY AND SOCIAL RELATIONS PROGRAMS

General Information
The interdisciplinary degree programs in Family and Social Relations combine courses from a variety of academic perspectives whose focus is upon the family as a fundamental unit in society. The program is designed to provide a comprehensive understanding of the family including its various possible structures, the relationships within, and the nature of its interaction with other social institutions. A background in Family and Social Relations has relevance to careers in law, teaching, social work, government service, family mediation, family court support services, and applied research in the areas of sexuality, child development, family violence, separation, divorce, and aging. Students selecting a general degree in Family and Social Relations can, with appropriate course selection, be prepared for application to four-year Honours and then graduate programs in psychology, sociology, and related disciplines.

Teaching Family and Social Relations

Students intending to teach Family and Social Relations at the Intermediate - Senior level in the school system are advised to take the following courses as a part of the Family and Social Relations program: 41-110, 46-223, 46-224, 46-240, 46-327, 48-204, 48-205, 48-226, 48-306, 48-329, 48-450, 48-214.

General Family and Social Relations

Total courses: thirty.

Major Requirements: eleven courses, including
(a) 48-110, 48-204; 48-205; 48-290; one of 48-390, 48-390, or 53-301*;
(b) one of 43-250, 43-251,46-240*, 48-306, 48-214, 53-100.
(c) five further courses, from among: 48-329, 48-409, 48-461, 48-251, 48-305, 48-351, 48-450, 43-463, 48-352, 48-353. 48-354, 48-408, 53-202, 53-310, 53-370, 46-223, 46-224, 46-327, 47-117, 47-118.

* 48-112 is a prerequisite for 48-214. 46-115 and 46-116 are prerequisites for further courses in Psychology. In History, 43-249, 48-250 or 48-251 must be taken before 43-463. 53-100 is a prerequisite for further courses in Women's Studies.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a)01-150, 01-151;
(b)02-250 (or equivalent);
(c) 46-115 and 46-116 if required as a prerequisite for courses chosen above: otherwise, two Social Science courses;
(d) 53-100 if required as a prerequisite for courses chosen above; otherwise, a Social Science course;
(e) additional courses from any area of study, including any course listed above not used to fulfill other requirements, to a total of thirty.

Honours Family and Social Relations

Total courses: forty.

*Major Requirements:*sixtenn courses, including
(a) 48-110, 48-204, 48-205, 48-290 (or equivalent), 48-308, one of 48-390, 48-390, 48-416, 53-301;
(b) one of 46-240, 48-306; 43-249, 43-250, 43-251, 48-214, or 53-100;
(c) three courses in the family, in sexuality or in gender:
Family Options: 48-329, 48-409**, 48-461**, 53-370;
Sexuality Options: 48-305, 48-351, 48-450, 43-363, 53-310;
Gender Options three from among those not chosen under (b) above, or from the following: 48-352, 48-353, 48-354, 48-408**, 53-202, 53-310, 53-370. If not selected under (b), 53-100 must be chosen here.
(d) six further courses selected from those not chosen above, or from the following: 46-223, 46-224, 46-327, 47-117, 47-118, 48-496.**

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;

(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) 02-250 (or equivalent);
(c) 46-115 and 46-116, if required as a prerequisite for courses chosen above: otherwise, two Social Science courses;
(d) 53-100, if required as a prerequisite for courses chosen above, but not used as part of a concentration in gender; otherwise, a Social Science course;
(e) additional courses from any area of study, including any course listed above not used to fulfil other requirements, to a total of forty.

* 48-112 is a prerequisite for 48-214, 46-115 and 46-116 are prerequisites for further courses in Psychology. In History, 43-249, 48-250 or 48-251 must be taken before 43-463. 53-100 is a prerequisite for further courses in Women's Studies.
** Highly recommended for those considering graduate work.

Note: Family and Social Relations Honours students interested in graduate studies in Sociology should include the following courses in their program: 48-291, 48-302, plus one of 48-403, 48-405, 48-408 or 48-415.

Combined Honours Family and Social Relations
(Not available for a Combined Honours degree with Sociology.)

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements - Family and Social Relations: thirteen courses, consisting of:
(a) 48-110, 48-204, 48-205, 48-290 (or equivalent), one of 48-390, 48-390, 48-416, or 53-301;*
(b) one of 48-214*, 46-240*, 48-306, 43-249, 43-250, 43-251, 53-100***;
(e) three courses from one of the following areas:
Family: 48-329, 48-409**, 48-461**, 53-370*;
Sexuality: 48-251, 48-305,48-351, 48-450**, 53-310*;
Gender: 48-352, 48-353, 48-354, 48-408**, 53-202*, 53-310*, 53-370*;
(f) four courses from those not selected aboce, or from the following: 46-223*, 46-224*, 46-327*, 47-117, 47-118, 48-496**

* 48-112 is a prerequisite for 48-214, 46-115 and 46-116 are prerequisites for further courses in Psychology.
In History, 43-249, 48-250 or 48-251 must be taken before 43-463. 53-100 is a prerequisite for further courses in Women's Studies.
** Highly recommended for those considering graduate work.
***Students who plan to take additional Women's Studies courses must take this course.

Major requirements - Other Subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) 02-250 (or equivalent)
(c) additional courses from any area of study to a total of forty.

Note: Family and Social Relations Honours students interested in graduate studies in Sociology should include the following courses in their program: 48-291, 48-302, plus one of 48-403, 48-405, 48-408 or 48-415.

Minor in Family and Social Relations

Required: 48-204, 48-206, 48-306, 48-329, 48-351; and one of 48-352, 48-409, 48-461.

Minor in Studies of Sexuality

Required: six of 48-205, 53-220, 46-240, 48-450, 48-351, 43-463 (or 53-463).

SOCIOLOGY, ANTHROPOLOGY AND CRIMINOLOGY: COURSES

Fall 2015 Undergraduate Calendar

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CHEMISTRY AND BIOCHEMISTRY

PROGRAMS

CHEMISTRY
Honours Chemistry
Honours Chemistry with Thesis
Honours Chemistry and Physics
Honours Chemistry and Physics with Thesis
Concurrent Bachelor of Science (Honours) Chemistry (with thesis)/Bachelor of Education
Concurrent Bachelor of Science (Honours) Chemistry/Bachelor of Education
Chemistry Combined Honours Programs
Major and Minor Concentrations - Bachelor of Arts and Science: Chemistry
Minor in Chemistry

BIOCHEMISTRY
Honours Biochemistry
Honours Biochemistry with Thesis
Biology and Biochemistry (Health and Biomedical Stream)
Biochemistry Combined Honours Programs
Major and Minor Concentrations - Bachelor of Arts and Science: Biochemistry
Minor in Biochemistry

Additional Information: Chemistry and Biochemistry Program Regulations
Preparation for Graduate and Professional Schools
GENERAL UNDERGRADUATE REGULATIONS

Honours Chemistry

Total courses: forty courses

Major requirements: twenty courses, including 59-140, 59-141, 59-320, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-261, 59-321, 59-330, 59-340, 59-350, 59-351 and five additional courses at the 300 or 400 level. Of the five additional courses at the 300 or 400 level, at least three of them must be drawn from 59-331, 59-341, 59-352, 59-431, 59-435, 59-440, 59-441, 59-445, 59-450, 59-451, 59-476.
Other requirements:(a) 62-139 or 62-140, 62-141, 64-140 and 64-141;.(b) 62-120 and a minimum of two additional courses from the following list: 60-106, 62-215, 62-216, 64-220 or 64-222;(c) four courses from Arts, Languages or Social Sciences;(d) nine courses from any area of study.

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 59-140, 59-141, 62-120, 62-140, 62-141, 64-140 and 64-141.
Second Year: ten courses, including 59-320, 59-230, 59-235, 59-240, 59-241, 59-250 and 59-251.
(*Recommended:* fulfill at least two requirements from (b) above).
Third and Fourth Years: twenty courses, including 59-261, 59-321, 59-330, 59-340,59-350, 59-351 and five additional Chemistry and Biochemistry courses at the 300 or 400 level (see *Major requirements*, above).

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 59-140, 59-141, 62-120, 62-140, 62-141, 64-140 and 64-141.
Second Year: ten courses, including 59-230, 59-235, 59-240, 59-241, 59-250 and 59-251. (*Recommended:* fulfill at least two requirements from (b) above).
Third and Fourth Years: twenty courses, including 59-261, 59-320, 59-321, 59-330, 59-340 and 59-350 and six additional Chemistry and Biochemistry courses at the 300 or 400 level.

Honours Chemistry with Thesis

Total courses: forty courses

Major requirements: twenty courses, including 59-140, 59-141, 59-320, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-261, 59-321, 59-330, 59-340, 59-350,

59-351, 59-410*; and three additional courses at the 300 or 400 level. Of the three additional courses at the 300 or 400 level, at least two of them must be drawn from 59-331, 59-341, 59-352, 59-431, 59-435, 59-440, 59-441, 59-445, 59-450, 59-451, 59-476.

Other requirements:(a) 62-139 or 62-140, 62-141, 64-140 and 64-141;.(b) 62-120 and a minimum of two additional courses from the following list: 60-106, 62-215, 62-216, 64-220 or 64-222;(c) four courses from Arts, Languages or Social Sciences;(d) nine courses from any area of study.

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 59-140, 59-141, 62-120, 62-140, 62-141, 64-140 and 64-141.
Second Year: ten courses, including 59-320, 59-230, 59-235, 59-240, 59-241, 59-250 and 59-251. (*Recommended:* fulfill at least two requirements from (b) above).
Third and Fourth Years: twenty courses, including 59-261, 59-321, 59-330, 59-340, 59-350, 59-351, 59-410, and three additional Chemistry and Biochemistry courses at the 300 or 400 level (see *Major requirements*, above).

Honours Chemistry and Physics

Total courses: forty courses

Major requirements - Chemistry and Biochemistry: seventeen courses, including 59-140, 59-141, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-320, 59-321, 59-330, 59-340, 59-341, 59-350; 59-441 or 59-445; plus two other courses at the 300 or 400 level.

Major requirements - Physics: nine courses, including 64-140, 64-141, 64-151, 64-220, 64-222, 64-250, 64-320, and 64-323; plus one other course at the 300 or 400 level.

Note: 64-310 may be taken in place of 59-340, and 64-311 may be taken in place of 59-341.

Other requirements:
(a) 62-120, 62-139 or 62-140, 62-141, 62-215, 62-216, and 62-318;
(b) two courses from Arts, Languages, or Social Sciences;
(c) six courses from any area of study.

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 59-140, 59-141, 62-120, 62-140, 62-141, 64-140, 64-141, and 64-151.
Second Year: ten courses, including 59-230, 59-235, 59-240, 59-241, 62-215, 62-216, 64-220, and 64-222.
Third and Fourth Years: twenty courses, including 59-320, 59-250, 59-251, 59-321, 59-330, 59-340 (or 64-310), 59-341 (or 64-311), 59-350, 59-441 or 59-445, 62-318, 64-250, 64-320, 64-323; plus two additional Chemistry courses at the 300 or 400 level and one additional Physics course at the 300 or 400 level. Students interested in taking advanced physics courses in place of advanced chemistry courses, or vice versa, may do so with the permission of the Undergraduate Coordinator in the Department of Chemistry and Biochemistry

Honours Chemistry and Physics with Thesis

Total courses: forty courses

Major requirements - Chemistry and Biochemistry: seventeen courses, including 59-140, 59-141, 59-320, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-321, 59-330, 59-340, 59-341, 59-350; 59-441 or 59-445; 59-410* or both 64-412* and 64-413 (research).

Major requirements - Physics: nine courses, including 64-140, 64-141, 64-151, 64-220, 64-222, 64-250, 64-320, and 64-323; plus one other course at the 300 or 400 level.

Note: 64-310 may be taken in place of 59-340, and 64-311 may be taken in place of 59-341.

Other requirements:
(a) 62-120, 62-139 or 62-140, 62-141, 62-215, 62-216, and 62-318;
(b) two courses from Arts, Languages, or Social Sciences;
(c) six courses from any area of study.

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 59-140, 59-141, 62-120, 62-140, 62-141, 64-140, 64-141, and 64-151.
Second Year: ten courses, including 59-230, 59-235, 59-240, 59-241, 62-215, 62-216, 64-220, and 64-222.
Third and Fourth Years: twenty courses, including 59-320, 59-250, 59-251, 59-321, 59-330, 59-340 (or 64-310), 59-341 (or 64-311), 59-350, 59-441 or 59-445, 62-318, 64-250, 64-320, 64-323, 59-410 or both 64-412 and 64-413. Students interested in taking advanced physics courses in place of advanced chemistry courses, or vice versa, may do so with the permission of the Undergraduate Coordinator in the Department of Chemistry and Biochemistry.

Combined Honours Programs - Chemistry

Programs combining Chemistry with another major will consist of the following:

Total courses: forty.

Major requirements - Chemistry and Biochemistry: fifteen courses, consisting of 59-140, 59-141, 59-320, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-261, 59-321, 59-330 (or 59-331), and 59-340; plus two additional courses at the 300 or 400 level.

Major requirements - Other Subject: as prescribed by that area of study.

Other requirements:
(a)62-120, 62-139 or 62-140, 62-141, 64-140, 64-141 and 64-220;
(b)additional courses, if necessary, from any area of study to a total of forty courses.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS) - Chemistry

Major Concentration: 59-320; 59-230; 59-235; 59-240; 59-241; 59-250; 59-251; 59-261; four of 59-321, 59-330, 59-331, 59-340, 59-350, 59-351, 59-4xx. (*Other requirements:* 59-140, 59-141, 62-139 or 62-140, 62-141.)

Minor Concentration: two of 59-230, 59-240, 59-250; four of 59-320 or, 59-321 or, 59-235 or, 59-241 or, 59-251 or, 59-3x0 and 59-3x1 (*i.e.,* one pair of courses at the 300-level) (or permission of instructor). (*Other requirements:* 59-140, 59-141, 62-139 or 62-140, 62-141.)

Minor in Chemistry

The minor in Chemistry consist of six courses, including 59-140 and 59-141, plus four courses at the 200 level or above, one of which must be at the 300 level or above. All four courses at the 200 level and above must be in organic (x3x), inorganic (x5x), physical (x4x) and/or analytical (x2x) chemistry. Selected courses leading to the minor may not consist of anti-requisites to courses in the student's degree program. Students must also remember to select only courses which may be otherwise counted for credit towards their degree programs. The following courses cannot be used towards the minor in Chemistry: 59-201, 59-191, 59-232, 59-263, 59-332, 59-333, 59-352. An overall average of 67% or higher must be obtained, with no individual course having a grade lower than 60%-.

Honours Biochemistry

Total courses: forty courses

Major requirements: twenty courses, including 59-140, 59-141, 59-320, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-261, 59-321, 59-362, 59-363, 59-365, 59-380 (6-credit, 2 semester course) and four additional courses at the 300 or 400 level.

Other requirements:
(a) 55-140, 55-141, 55-211, 55-213, 62-139 or 62-140, 62-141, 64-140, 64-141 and 65-205;
(b) Four courses from Arts, Languages or Social Sciences;
(c) Seven courses from any area of study.

RECOMMENDED COURSE SEQUENCE
Note: 65-205 can be taken anytime in second, third or fourth year.
First Year: ten courses, including 55-140, 55-141, 59-140, 59-141, 62-140, 62-141, 64-140, 64-141 and two other courses.

Second Year: ten courses, including 55-211, 55-213, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-261 and one other course.
Third and Fourth Years: twenty courses, including 59-320, 59-321, 59-362, 59-363, 59-365, 59-380 (6-credit, 2 semester course) and four additional courses at the 300 or 400 level.

Honours Biochemistry with Thesis

Total courses: forty courses.

Major requirements: twenty courses, including 59-140, 59-141, 59-320, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-261, 59-321, 59-362, 59-363, 59-365, 59-380 (6-credit, 2 semester course), 59-410* and two additional courses at the 300 or 400 level.

Other requirements:
(a) 55-140, 55-141, 55-211, 55-213, 62-139 or 62-140, 62-141, 64-140, 64-141 and 65-205;
(b) Four courses from Arts, Languages or Social Sciences;
(c) Seven courses from any area of study.

RECOMMENDED COURSE SEQUENCE
Note: 65-205 can be taken anytime in second, third or fourth year.
First Year: ten courses, including 55-140, 55-141, 59-140, 59-141, 62-140, 62-141, 64-140, 64-141 and two other courses.
Second Year: ten courses, including 55-211, 55-213, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-261 and one other course.
Third and Fourth Years: twenty courses, including 59-320, 59-321, 59-362, 59-363, 59-365, 59-380 (6-credit, 2 semester course), 59-410 and two additional courses at the 300 or 400 level.

BSc Honours Biology and Biochemistry (Health and Biomedical Stream)
(This program is also listed under Biology)

Total courses: forty.

*Major requirements:*nineteen required courses, including 55-140, 55-141, 55-202, 55-204, 55-205, 55-211, 55-213, 55-238, 55-258, 55-341, 55/59-380 (6.0 credits), 59-140, 59-141, 59-320, 59-230, 59-261, 59-362, 59-365.

and seven courses from the following:

(a) one of 55-350, 55-353;
(b) two courses from 55-342, 55-355, 55-351*, 59-391, 59-363;
(c) two courses from 55-352*, 55-357, 59-240, 59-321;
(d) two courses from 55-420**, 55-448, 55-450, 55-453, 55-454, 55-455, 55-460, 55-485, 59-410**, 59-466, 59-464, 59-468, 59-469, 59-480, 64-370.

Other requirements:

(e) five science courses, including: 64-140, 64-141, 62-140, 62-141, 65-205;
(f) four options from Arts/Languages or Social Sciences, with at least one from each;
(g) five courses from any area of study.

* Note that 55-351 & 55-352 are antirequisites.
** Undergraduate research courses are taken both in Fall & Winter (as two courses).

Recommended options (if any):
Students considering application to some Pharmacy schools are advised to take 59-240 (which will help satisfy (c) above), and 59-235 (Introductory Organic Chemistry II).

Qualified students who find a supervisor may complete a thesis option (55-420 or 59-410) as part of their degree program.

Students considering applying to professional schools are advised to look at individual admission requirements for programs of interest when choosing optional courses. Regular (annual) academic advising is strongly recommended for all

students in this program.

Combined Honours Programs - Biochemistry

Programs combining Biochemistry with another major will consist of the following:

Total courses: forty.

Major requirements-Chemistry and Biochemistry: fifteen courses, consisting of 59-140, 59-141,59-320, 59-230, 59-235, 59-240, 59-241, 59-250, 59-251, 59-261, 59-321, 59-362, 59-363, 59-365, and one additional course at the 300 or 400 level.

Major requirements-Other Subject: as prescribed by that area of study.

Other requirements:
(a)55-140, 55-141, 55-211, 55-213, 62-139 or 62-140, 62-141, 64-140, and 64-141;
(b)additional courses, if necessary, from any area of study to a total of forty courses.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS) - Biochemistry

Major Concentration: 59-320, 59-230, 59-240, 59-250, 59-261, five of 59-362, 59-363, 59-365, 59-464, 59-466, 59-468, 59-4xx; plus 55-211 and 55-213. (*Other requirements:* 59-140, 59-141, 55-140, 55-141.)

Minor Concentration: 59-230, 59-261; four of 59-362, 59-363, 59-365, 59-320, 59-235.
(*Other requirements:* 55-140, 55-141, 59-140, 59-141, 62-139 or 62-140, 62-141)

Minor in Biochemistry

The minor in Biochemistry consists of seven courses, including 59-140, 59-141, 59-230, and 59-261, plus three courses at the 300 level or above. The courses at the 300 level or above must be chosen from 59-362, 59-363, 59-365, 59-391, 59-464, 59-466, 59-468, 59-469 and/or 59-480. Selected courses leading to the minor may not consist of anti-requisites to courses in the student's degree program. Students must also remember to select only courses which may be otherwise counted for credit towards their degree programs. The following courses cannot be used towards the minor in Biochemistry: 59-201, 59-191, 59-232, 59-263, 59-332, 59-333, 59-352. An overall average of 67% or higher must be obtained, with no individual course having a grade lower than 60%.

Chemistry and Biochemistry Program Regulations

1) *The prerequisite for 59-410 is a major average of 70% and a cumulative average of 70%.

2) Unless otherwise stated, students in Chemistry and Biochemistry must take the course with laboratory where two offerings differing only in the presence or absence of a laboratory component are listed. This regulation is effective beginning Fall 2010 for all Chemistry and Biochemistry courses counted towards the major requirements, regardless of the student's calendar.

Standing Required: For continuation in any Chemistry or Biochemistry program at the second level, a student must obtain a minimum of 60% in both Chemistry 59-140 and 59-141, or the equivalent. Students in Biochemistry also must obtain a minimum of 60% in both Biology 55-140 and 55-141. The Department offers three Honours programs which are accredited by the Canadian Society for Chemistry: Honours Chemistry, Honours Chemistry and Physics, and Honours Biochemistry, as well as a program in Honours Biochemistry and Biotechnology.

Preparation for Graduate and Professional Schools
Courses are available to permit the student to become fully prepared for entry into medical, dental, and pharmacy schools, as well as graduate programs in the physical and life sciences. Students should determine as early as possible the specific requirements for graduate or professional schools and programs that they may wish to apply for after completing all or part of a Chemistry or Biochemistry program. Academic advisors are available. Since many graduate schools have language requirements, students who may subsequently choose to enter graduate school are strongly advised to consider a selection of courses which includes the prominent scientific languages, French and German.

Fall 2015 Undergraduate Calendar

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BIOLOGICAL SCIENCES

PROGRAMS

Honours Biological Sciences
Honours Biological Sciences with Thesis
Honours Biology and Biotechnology
BSc Honours Program in Behaviour, Cognition and Neuroscience
BSc Honours Biology and Biochemistry (Health and Biomedical Stream)
Concurrent Bachelor of Science (Honours) Biological Sciences/Bachelor of Education
Concurrent Bachelor of Science (Honours) Biological Sciences(with thesis)/Bachelor of Education
Combined Honours Programs
Major and Minor Concentrations - Bachelor of Arts and Science
Minor in Biological Sciences

Additional Information: Program Information
GENERAL UNDERGRADUATE REGULATIONS

Honours Biological Sciences
Undergraduate students may be allowed, with the consent of the instructor, to take one graduate course for credit.

Total courses: forty.

*Major requirements:*twenty courses, including the “Core” courses 55-140, 55-141, 55-210, 55-211, 55-213, and 55-341; and fourteen other Biology courses. At least nine courses must be at the 300 level or above. (Recommended: 55-238 and 55-320.)

Other requirements:
(a) eight Science courses, including 59-140, 59-141, 59-230, 59-261, 65-205, 62-130 (or 62-140 (or 62-139) and 62-141), and at least one pair of both 66-140 and 66-141, or both 64-130 and 64-131, or both 64-140 and 64-141, or both 60-104 or 60-106 and 60-205, or both 60-140 and 60-141, or both 66-100 and 66-102;
(b) six additional Science courses (five additional courses if taking 62-140 (or 62-139) and 62-141), excluding *41-XXX and including additional courses in Biology. At least two of these courses must be at the 300 level or above;
(c)four options from Arts/Languages or Social Sciences, with at least one from each;
(d)two courses from any area of study.

*41- XXX courses will be counted as Social Science courses.

Honours Biological Sciences with Thesis

Undergraduate students may be allowed, with the consent of the instructor, to take one graduate course for credit.

Total courses: forty.

*Major requirements:*twenty courses, including the “Core” courses 55-140, 55-141, 55-210, 55-211, 55-213, and 55-341; and fourteen other Biology courses including 55-420*. At least nine courses must be at the 300 level or above. (Recommended: 55-238 and 55-320.)

*It should be noted that only students who have maintained a major average of 70% and a cumulative average of 60% will be permitted to enroll in 55-420.

Other requirements:
(a) eight Science courses, including 59-140, 59-141, 59-230, 59-261, 65-205, 62-130 (or 62-140 (or 62-139) and 62-141), and at least one pair of both 66-140 and 66-141, or both 64-130 and 64-131, or both 64-140 and 64-141, or both 60-104 or 60-106 and 60-205, or both 60-140 and 60-141, or both 66-100 and 66-102;
(b) six additional Science courses (five additional courses if taking 62-140 (or 62-139) and 62-141),excluding *41-XXX and including additional courses in Biology. At least two of these courses must be at the 300 level or above;
(c) four options from Arts/Languages or Social Sciences, with at least one from

each;
(d) two courses from any area of study.

*41- XXX courses will be counted as Social Science courses

Honours Biology and Biotechnology

Total courses: 40

Major requirements-Biological Sciences: 55-140, 55-141, 55-210, 55-211, 55-213, 55-238, 55-341, 55-350, 55-353, 55-380 (6-credit, 2 semester courses), 55-420(6-credit, 2 semester courses), 55-460, 55-464.

Major requirements-Chemistry and Biochemistry: 59-140, 59-141, 59-230, 59-250, 59-261, 59-320, 59-321, 59-362, 59-363, 59-365, 59-468, 59-480.

Other requirements-thirteen courses:
(a) 60-104 or 60-106, 62-130 (or 62-140 (or 62-139) and 62-141), 65-205, and one pair of both 64-140, and 64-141 or both 64-130 (or 64-140) and 64-131 (not pair 64-130 and 64-141)
(b) Four courses from Biotechnology Options (see below);
(c) Four courses from any other area of study or, if taking 62-140 and 62-141, three courses. (Recommended: 34-227 or 34-228).

Biotechnology Options:
55-342, 55-320, 55-351, 55-355, 55-357, 55-430, 55-453, 55-454, 55-480, 59-464, 59-466.

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 55-140, 55-141, 59-140, 59-141, 60-104 (or 60-106), 62-130, 64-140, 64-141, 65-205, and one optional course.
Second Year: ten courses, including 55-211, 55-213, 55-238, 55-342, 59-230, 59-250, 59-261, and three optional courses.
Third Year: nine course, including 55-210, 55-350, 55-380*, 59-320, 59-321, 59-362, 59-363, 59-365, and one optional course.
Fourth Year: nine courses, including 55-420*, 55-460, 55-464, 59-468, 59-480, and three optional courses.

BSc Honours in Behaviour, Cognition and Neuroscience
(This program is also listed under Psychology)

Neuroscience is a strong and growing field that strives to understand brain function at the molecular, behavioural and cognitive levels. This interdisciplinary program comprises required courses primarily from the departments of Biological Sciences and Psychology. Students also participate in bi-weekly research colloquia. In their final year, students prepare a research-based thesis in behaviour, cognition or neuroscience. Students must maintain an average of 70% or higher in Biology and Psychology courses. Entry to the fourth year thesis course, 46-496, requires a psychology average of 77% for Behaviour, Cognition and Neuroscience majors.

Total courses: forty.

Major requirements - Biological Sciences: 55-140, 55-141, 55-204, 55-210, 55-211, 55-213, 55-258, 55-341, 55-458, and 55-485; plus one additional biology course~~s~~.

Major requirements - Psychology: 46-115, 46-116, 46-223, 46-256, 46-313, 46-322 (or 46-323), 46-353, 46-335, 46-358 and 46-457.

Major requirements - Biological Sciences or Psychology: 55-323 or 46-355; 55-320 ~~(~~or 46-230~~)~~; and an honours thesis in the area of behavioural or cognitive neuroscience chosen from 55-420, or 46-496 and 46-497, or 59-410.

Other requirements:
(a) 65-205 ~~(~~or 02-250~~)~~;
(b) one pair of both 64-130 and 64-131, or both 64-140 and 64-141, or both 60-104 (or 60-106) and 60-205, or both 66-140 and 66-141, or both 66-100 and 66-102
(c) 59-140, 59-141, 59-230, 59-261;
(d) two courses from Arts and Social Sciences excluding Psychology;
(e) four courses at 300 level or above in Biology, Chemistry, Psychology, or Kinesiology;

(f) two courses from any area of study (62-130) is recommended).

Non-credit course: Colloquia and Seminars in Current Behaviour, Cognitive and Neuroscience Research: bi-weekly presentations of recent research by investigators within the university and from other universities and research institutions. Attendance by key faculty members and all students is expected. A notation will be added to the student's transcript upon successful completion of the course.

RECOMMENDED COURSE SEQUENCE
First Year: ten courses, including 55-140, 55-141, 59-140, 59-141, 46-115, 46-116, 02-250 (or 65-205); at least one pair of both 64-140 and 64-141 or both 60-104 (60-106) and 60-205, or both 66-140 and 66-141, or both 66-100 and 66-102, and one optional course (62-130 recommended).
Second Year: ten courses, including 55-204, 55-210, 55-211, 55-213, 55-258, 46-223, 46-256, 59-230 and 59-261.
Third Year: ten courses, including 55-320 (or 46-230), 55-341, 55-323 or 46-355*, 46-353, 46-358, and 46-313
Fourth Year: ten courses: including 46-322 (or 46-323), 46-335, 55-485, 46-457, 55-420 (or 46-496 and 46-497, or 59-410), and 55-458.

*55-323 or 46-355 should be taken in third or fourth year.

55-323 should be taken in third or fourth year.

BSc Honours Biology and Biochemistry (Health and Biomedical Stream)
(This program is also listed under Biochemistry)

Total courses: forty.

*Major requirements:*nineteen required courses, including 55-140, 55-141, 55-202, 55-204, 55-205, 55-211, 55-213, 55-238, 55-258, 55-341, 55/59-380 (6.0 credits), 59-140, 59-141, 59-230, 59-261, 59-320, 59-362, 59-365.

and seven courses from the following:

(a) one of 55-350, 55-353;
(b) two courses from 55-342, 55-355, 55-351*, 59-391, 59-363;
(c) two courses from 55-352*, 55-357, 59-240, 59-321;
(d) two courses from 55-420**, 55-448, 55-450, 55-453, 55-454, 55-455, 55-460, 55-485, 59-410**, 59-466, 59-464, 59-468, 59-469, 59-480, 64-370.

Other requirements:

(e) five science courses, including: 64-140, 64-141, 62-140, 62-141, 65-205;
(f) four options from Arts/Languages or Social Sciences, with at least one from each;
(g) five courses from any area of study.

* Note that 55-351 & 55-352 are antirequisites.
** Undergraduate research courses are taken both in Fall & Winter (as two courses).

Recommended options (if any):
Students considering application to some Pharmacy schools are advised to take 59-240 (which will help satisfy (c) above), and 59-235 (Introductory Organic Chemistry II).

Qualified students who find a supervisor may complete a thesis option (55-420 or 59-410) as part of their degree program.

Students considering applying to professional schools are advised to look at individual admission requirements for programs of interest when choosing optional courses. Regular (annual) academic advising is strongly recommended for all students in this program.

Combined Honours Programs

Total courses: forty.

Major requirements-Biological Sciences: fourteen courses, including the "Core" courses of 55-140, 55-141, 55-210, 55-211, 55-213, and 55-341. In addition to 55-341, at least five courses must be at the 300 level or above.

Major requirements-Other Subject: as prescribed by that area of study.

Other requirements:
(a) 59-140, 59-141, 59-230, 59-261, 62-130, 65-205, and one pair of both 60-104 or 60-106 and 60-205, or both 60-140 and 60-141, or both 66-140 and 66-141, or both 64-130 and 64-131, or both 64-140 and 64-141, or both 66-100 and 66-102
(b)additional courses from any area of study to a total of forty.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 55-210; 55-211; 55-213; 55-341; 59-230; 59-261; one additional 200-level course; two 200 or 300-level courses; three 300-level or above courses. (*Other requirements:* 55-140, 55-141, 59-140, 59-141.)

Minor Concentration: 55-210; 55-211; 55-213; 55-341; one other 200-level course; one 300-level or above courses. (*Other requirements:* 55-140, 55-141, 59-140, 59-141.)

Minor in Biological Sciences

A minor in Biological Sciences requires an average of 60% or better in the six Biology courses, 55-140, 55-141, 55-210, 55-211, 55-213, and 55-341.

PROGRAM INFORMATION

Placement
Students without Grade 12“U” Biology or equivalent and who were admitted to other University programs may be allowed to substitute Biology 55-100 and 55-101 as prerequisites for Biology 55-140 and 55-141 provided that a combined average of at least 70% is obtained in those courses. However, they will not receive credit towards a B.Sc. degree in Biological Sciences for 55-100 and 55-101.

Areas of Study in Biological Sciences
The B.Sc. in Biological Sciences provides entry to a broad range of teaching, research, and biomedical careers. Most require formal, post-graduate training, and it is the student's responsibility to determine, as early as possible, the specific requirements of programs to which he or she wishes to proceed.

Programs in Biological Sciences provide a solidly based background ensuring that the general requirements of post-graduate programs will be fulfilled. The array of courses offered is such that students may emphasize areas of particular interest or aptitude. Advice on career paths and on course selection is available to students through a student advising program. Pursuit of the Honours with thesis degree is strongly recommended for professional advancement in science.

Preparation for Graduate and Professional Schools
Courses are available to permit the student to become fully prepared for entry into medical, dental, pharmacy, and other professional schools, as well as graduate programs in the biological sciences. Pre-professional advising is available in the Faculty of Science Office, Essex Hall. Students should seek advice on course selection early in their program.

BIOLOGICAL SCIENCES: COURSES

Fall 2015 Undergraduate Calendar

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Main University Secretariat

CIVIL AND ENVIRONMENTAL ENGINEERING

PROGRAMS
Civil Engineering
Environmental Engineering

CERTIFICATE
Honours Certificate in Environmental Engineering
Honours Certificate in Civil Engineering

DEGREE COMPLETION PROGRAMS
Bachelor of Applied Science in Civil Engineering for Graduates of St Mary's University Diploma of Engineering

Additional Information: Faculty of Engineering Program Information, Regulations, Co-operative Education
GENERAL UNDERGRADUATE REGULATIONS

Bachelor of Applied Science in Civil Engineering ***(For students who entered the program Fall 2008 to present)***

Civil engineering comprises the conception, design, operation, and maintenance of buildings, railroads, waterways, bridges, harbours, tunnels, water supply and purification systems, sewage collection and treatment facilities, hydraulic structures, and waterpower developments. The Civil Engineering curriculum provides a diversity of applied course work and aids the student in selecting a major field of endeavour as well as a thorough background in the basic sciences and a broad understanding of the social sciences and humanities.

The Civil Engineering program provides modern and comprehensive laboratory facilities in the following fields: Strength of Materials, Soil Mechanics, Hydraulics, Structures, Concrete, Sanitary Engineering, and Surveying. The Canadian Society for Civil Engineering has an active student section on campus.

Note: The baccalaureate degree program in Civil Engineering is accredited by the Canadian Engineering Accreditation Board of the Canadian Council of Professional Engineers.

FIRST AND SECOND YEAR - Common to all Civil And Environmental Engineering Programs

Year 1 - Fall (Semester 1)
85-111. Engineering Mechanics I
85-133. Engineering and Design
62-140. Differential Calculus
62-126. Linear Algebra
85-118. Engineering and the Profession

Year 1 - Winter (Semester 2)
85-120. Engineering Thermo fluids
62-141. Integral Calculus
64-141. Introduction to Physics II
59-110. Topics General Chemistry
85-119. Technical Communications

SECOND YEAR

Students must have completed at least eight (8) of their 1st year courses before being allowed to register into the 2nd year courses.

Year 2 - Fall Term (Semester 3)
85-232. Engineering Software Fundamentals
85-234. Electrical and Computing Fundamentals
85-250. Engineering and the Environment
92-210. Dynamics
62-215. Vector Calculus

Non-Technical Elective

Year 2 - Winter Term (Semester 4)
85-218. Mechanics of Deformable Bodies
85-222. Treatment of Experimental Data
87-220. Civil Engineering Information Systems
87-219. Materials in Civil and Environmental Engineering
85-220 Numerical Analysis for Engineering *(Formerly 92-222)*
62-216. Differential Equations

Year 2 - Summer Term (Co-op students only)
85-298. (Work Term I)

THIRD YEAR

Students must have completed all the 1st year courses and at least nine (9) of their 2nd year courses before being allowed to register into the 3rd year courses.

Year 3 - Fall (Semester 5)
87-351 Fluid Mechanics
87-352 Stress Analysis
87-353 Structural Analysis
87-354 Concrete Design
87-355 Geotechnical Engineering I
85-313 Engineering Economy

Year 3 - Winter Term (Co-op students Only)
85-398. Work Term II

Year 3 - Summer (Semester 6)
87-361 Masonry and Concrete Design
87-362 Finite Element For Analysis and Design
87-363 Geotechnical Engineering II
87-364 Structural Steel Design
87-365 Transportation and Traffic Engineering

FOURTH YEAR

Students cannot register into any of the 4th year courses until they have completed nine (9) 3rd year Civil Engineering courses and all courses from 1st and 2nd year.

Year 4 – Fall Term (Co-op students only)
85-498. Work Term III

Year 4 - Winter (Semester 7)
87-400 Capstone Design
93-471 Water Distribution and Wastewater Collection Systems
87-471 Hydrology
87-472 Hydraulics
93-363 Water and Wastewater Treatment
Non-Technical Elective

Year 4 - Summer (Semester 8)
87-400 Capstone Design
87-481 Highway Design and Construction
85-421 Engineering and Society
87-482 Plan and Construction Management
Technical Elective (1)
Technical Elective (2)

Technical Electives:
87-491 Foundation Engineering
87-492 Advanced Topics in Structural Design
87-493 Hydrological and Hydraulic Modeling
87-494 Transportation Systems Analysis
93-481 Sustainability in Engineering
93-482 Hydrogeological Engineering

Bachelor of Applied Science in Environmental Engineering *(For students who entered the program Fall 2008 to present)*

The program in Environmental Engineering is built upon a broad base of science and mathematics combined with an emphasis on engineering principles and design.

The rapid growth of industrial activities has produced many new problems related to environmental protection, resource conservation, and safety. The public has been aware of the risks involved in handling a wide range of hazardous and toxic materials by major incidents which have occurred in spite of improved design methods and operating techniques to overcome potential problems. Consequently, legislation is being formulated and enacted to control the release of toxic chemicals and pollutants into our environment. Environmental engineers are trained not only to solve problems of immediate concern, but also to develop practices and processes to systematically avoid their occurrence.

Environmental engineers have qualifications which will permit them to focus upon the transport, transformation and removal of contaminants in air, water, and soil, as well as the broader aspects of environmental planning and impact assessment.

Note: The baccalaureate degree program in Environmental Engineering is accredited by the Canadian Engineering Accreditation Board of the Canadian Council of Professional Engineers. With appropriate selection of electives, students would be qualified to apply to medical schools.

FIRST AND SECOND YEAR - Common to all Civil And Environmental Engineering Programs

Year 1 - Fall (Semester 1)
85-111. Engineering Mechanics I
85-133. Engineering and Design
62-140. Differential Calculus
62-126. Linear Algebra
85-118. Engineering and the Profession

Year 1 - Winter (Semester 2)
85-120. Engineering Thermo fluids
62-141. Integral Calculus
64-141. Introduction to Physics II
59-110. Topics General Chemistry
85-119. Technical Communications

SECOND YEAR

Students must have completed at least eight (8) of their 1st year courses before being allowed to register into the 2nd year courses.

Year 2 - Fall Term (Semester 3)
85-232. Engineering Software Fundamentals
85-234. Electrical and Computing Fundamentals
85-250. Engineering and the Environment
92-210. Dynamics
62-215. Vector Calculus
Non-Technical Elective

Year 2 - Winter Term (Semester 4)
85-218. Mechanics of Deformable Bodies
85-222. Treatment of Experimental Data
87-220. Civil Engineering Information Systems
87-219. Materials in Civil and Environmental Engineering
85-220 Numerical Analysis for Engineering
62-216. Differential Equations

Year 2 - Summer Term (Co-op students only)
85-298. (Work Term I)

THIRD YEAR

Students must have completed all the 1st year courses and at least nine (9) of their 2nd year courses before being allowed to register into the 3rd year courses.

Year 3 - Fall (Semester 5)
85-313. Engineering Economy
87-351. Fluid Mechanics
87-352. Stress Analysis
87-355. Geotechnical Engineering I

93-351. Thermodynamics
93-352. Environmental Chemical Analysis

Year 3 – Winter (Semester 6)
55-140. Biological Diversity
87-471. Hydrology
93-361. Transport Phenomema
93-362. Air Pollution Control
93-363. Water/Wastewater Treatment
93-364. Materials Recovery/Waste Management

Year 3 - Summer Term (Co-op students Only)
85-398. Work Term II

FOURTH YEAR

Students cannot register into any of the 4th year courses until they have completed nine (9) 3rd year Civil Engineering courses and all courses from 1st and 2nd year.

Year 4 – Fall Term (Co-op students only)
85-498. Work Term III

Year 4 - Winter (Semester 7)
87-472. Hydraulics
93-400. Capstone Design
93-471. Water Dist./Wastewater Coll.
93-472. Chemical Reaction Engineering
93-473. Environmental Engineering Microbiology
Non-Technical Elective

Year 4 - Summer (Semester 8)
85-421. Engineering and Society
93-400. Capstone Design
93-481. Sustainability in Engineering
93-482. Hydrogeological Engineering
Technical Elective

Technical Electives:
87-363. Geotechnical Engineering II
87-365. Transportation and Traffic Engineering
87-482. Planning and Construction Management
92-324. Engineering Measurements
92-328. Heat Transfer
92-455. Environmental Effects and Control of Noise

Honours Certificate in Environmental Engineering

Admission Requirements:
A candidate for the Honours Certificate in Environmental Engineering shall hold the degree of (i) Bachelor of Applied Science (B.A.Sc.); (ii) a four-year B.Sc. (or BCS) degree in Chemistry, Biochemistry, Biotechnology, Earth Sciences or related Science fields. The program can be also taken concurrently by 3rd year and 4rth year students at the University of Windsor in Engineering and Science Fields.

Total courses:
Eight (8) courses [minimum of 6 upper year courses (Years 3 and 4), and up to 8 if the student has all the pre-requisite, or their equivalent, courses.

Major requirements:
The program consists of eight (8) undergraduate courses, at the 300 or 400-level, as listed in the program requirements for the BASc in Environmental Engineering. Students with an undergraduate Bachelor of Science degree may take a minimum of two courses at the 200-level.

The present pre-requisite requirements for 3rd and 4th year courses must be respected. All selected courses should not be from courses, subjects or topics that were part of the applicant's undergraduate studies.

If students from another program are missing pre-requisites courses critical for successful completion of the certificate, they are to choose from appropriate 2nd year courses. A maximum of 2 courses from the pre-requisite courses will count

towards the certificate, although more may be necessary depending on the student's background.

To qualify for the certificate, students will be required to successfully complete all 8 courses at the University of Windsor. No transfer credit will be considered for this certificate.

Honours Certificate in Civil Engineering

Admission Requirements:
A candidate for the Honours Certificate in Civil Engineering shall hold the degree of (i) Bachelor of Applied Science (B.A.Sc.); (ii) a four-year B.Sc. (or BCS) Science fields degree. The program can also be taken concurrently by the 3rd and 4th years University of Windsor students in Engineering and Science fields.

Total courses:
Eight (8) courses [minimum of 6 upper year courses (Years 3 and 4), and up to 8 if the student has all the pre-requisite, or their equivalent, courses].

Major requirements:
The program consists of eight (8) undergraduate courses, at the 300 or 400-level, as listed in the program requirements for the BASc in Civil Engineering. Students with an undergraduate Bachelor of Science degree may take a minimum of two courses at the 200-level.

The present pre-requisite requirements for 3rd and 4th year courses must be respected. All selected courses should not be from courses, subjects or topics that were part of the applicant's undergraduate studies.

If students from another program are missing pre-requisites courses critical for successful completion of the certificate, they are to choose from appropriate 2nd year courses. A maximum of 2 courses from the pre-requisite courses will count towards the certificate, although more may be necessary depending on the student's background.

To qualify for the certificate, students will be required to successfully complete all 8 courses at the University of Windsor. No transfer credit will be considered for this certificate.

Bachelor of Applied Science in Civil Engineering for Graduates of St Mary's University Diploma of Engineering

Total courses: 25

YEAR 1

Fall Term
87-352 Stress Analysis
87-353 Structural Analysis
87-354 Concrete Design
87-355 Geotechnical Engineering I

Winter Term
01-151 Effective Writing II
87-219 Materials in Civil and Environmental Engineering
87-220 Civil Engineering Information Systems
85-220 Analysis of Engineering Systems

Summer Term
87-361 Masonry and Concrete Design
87-362 Finite Element for Analysis and Design
87-363 Geotechnical Engineering II
87-364 Structural Steel Design
87-365 Transportation and Traffic Engineering

Students cannot register into any of the 4th year courses until they have completed nine (9) 3rd year Civil Engineering courses and all courses from 1st and 2nd year.

YEAR 2

Winter Term

87-400 Capstone Design Project
93-471 Water Distribution and Wastewater Collection Systems
87-471 Hydrology
87-472 Hydraulics
93-363 Water and Wastewater Treatment
Non-Technical Elective

Summer Term
87-400 Capstone Design Project
87-481 Highway Design and Construction
85-421 Engineering and Society
87-482 Planning and Construction Management
Technical Elective 1
Technical Elective 2

TECHNICAL ELECTIVES:
87-491 Foundation Engineering
87-492 Advanced Topics in Structural Design
87-493 Hydrological and Hydraulic Modeling
87-494 Transportation Systems Analysis
93-481 Sustainability in Engineering
93-482 Hydrogeological Engineering

CIVIL AND ENVIRONMENTAL ENGINEERING: COURSES

ENGINEERING: GENERAL COURSES (85-)
ENGINEERING: NON-TECHNICAL ELECTIVE COURSES

CIVIL AND ENVIRONMENTAL ENGINEERING: GRADUATE PROGRAMS

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COMMUNICATION, MEDIA, AND FILM

PROGRAMS
General Communication, Media, and Film
Honours Communication, Media, and Film
Combined Honours Communication, Media and Film
Combined Honours Digital Journalism and Communication, Media and Film
(Housed in Inter-faculty programs)
Combined Honours Drama and Communication Studies, Media and Film
Combined Honours Visual Arts and Communication, Media, and Film
Minor in Communication, Media, and Film
Major and Minor Concentrations - Bachelor of Arts and Science

Additional Information: GENERAL UNDERGRADUATE REGULATIONS

General Communication, Media, and Film
Total courses: thirty.

*Major requirements: Major requirements:*ten courses, including 40-101, 40-234, 40-275 plus one of 40-201, 40-225, 40-334 or 40-375, plus six additional courses, at least two of which must be at the 300 or 400 level.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) six courses from any area of study, including Communication, Media, and Film;
(c) six courses from any area of study, excluding Communication, Media, and Film.

Honours Communication, Media, and Film

Total courses: forty.

Major requirements: twenty courses including 40-101, 40-234, 40-275, plus one of 40-201, 40-225, 40-334 or 40-375, plus sixteen additional courses, at least five of which must be at the 300 or 400 level, and at least two of those must be at the 400 level. (40-398, 40-399, 40-498 and 40-499 do not count as fulfilling the 300 and 400 level requirements; only one of 40-489 or 40-495 may be used to satisfy the 400 level requirement.)

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) four courses from any area of study, including Communication, Media, and Film;
(c) eight courses from any area of study, excluding Communication, Media, and Film.

NOTE: With the permission of the Department Head, up to two courses not offered or not cross-listed by the Department of Communication, Media, and Film may be used to satisfy the Major requirement for Honours Communication, Media, and Film degrees, provided a significant portion of the course content covers topics from communication, media, or film.

Combined Honours Communication, Media and Film

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements

under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements-Communication, Media, and Film: sixteen courses including 40-101, 40-234, 40-275, plus one of 40-201, 40-225, 40-334 or 40-375, plus twelve additional courses, at least three of which must be at the 300 or 400 level, and at least two of those must be at the 400 level. (40-398, 40-399, 40-498 and 40-499 do not count as fulfilling the 300 and 400 level requirements; only one of 40-489 or 40-495 may be used to satisfy the 400 level requirement.)

Major requirements-Other subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) additional courses from any area of study to a total of forty courses.

***Students interested in taking the first-year prerequisite (40-112) for digital media production courses must be Honours students in Communication, Media and Film or combined four-year Honours programs with Communication, Media and Film. Entry into advanced digital media production courses will be based on academic performance and portfolio review after the successful completion of introductory production courses.

NOTE: With the permission of the Department Head, up to two courses not offered or not cross-listed by the Department of Communication, Media, and Film may be used to satisfy the Major requirement for Honours Communication, Media, and Film degrees, provided a significant portion of the course content covers topics from communication, media, or film.

Minor in Communication, Media, and Film

Required: six Communication, Media, and Film courses, consisting of 40-101, any two of the following: 40-201, 40-225, 40-234, 40-275, 40-334, 40-375, plus three additional courses, with at least one at the 300 level or above.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: twelve courses, including 40-101, 40-234, 40-275, plus one of 40-201, 40-225, 40-334, 40-375, plus eight additional Communication, Media, and Film courses three of which must be at the 300-level or above (40-398, 40-399, 40-498, 40-499 do not count as fulfilling the 300-level or above requirement).

Minor Concentration: six courses, including 40-101, 40-234, 40-275, plus one of 40-201, 40-225, 40-334, 40-375, two additional Communication, Media, and Film courses, one of which must be at the 300-level or above (40-398, 40-399, 40-498, and 40-499 do not count as fulfilling the 300-level or above requirement).

COMMUNICATION, MEDIA AND FILM: COURSES
DIGITAL JOURNALISM: COURSES

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INTER-FACULTY PROGRAMS

DIGITAL JOURNALISM

Combined Honours Digital Journalism and Communication, Media and Film
Combined Honours Digital Journalism and English Language and Literature
Combined Honours Digital Journalism and English Literature and Creative Writing
Combined Honours Digital Journalism and Political Science

BA Combined Honours Digital Journalism and Communication, Media and Film

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements-Digital Journalism: sixteen courses, including:
a) 30-140, 30-240,30-340 (6.0 credit course taken over 2 semesters), 30-440 (6.0 credit course taken over 2 semesters)
(b) 30-125, 30-120, 30-230, 30-222, 30-220, 30-225, 30-320.
(c) three from 26-302, 26-304, 26-307, 26-399, 45-201, 45-213, 45-378, 45-379, 40-201, 40-243, 40-301, 40-360, 40-370

Option requirements: six courses including
(a) two courses from Languages or Science;
(b) two courses from Arts
(c) two courses from any area of study, excluding Social Sciences.

Major requirements - Communication, Media, and Film: sixteen courses, including: 40-101, 40-234, 40-275, plus one of 40-201, 40-225, 40-334 or 40-375, plus twelve additional courses (40-xxx), at least three of which must be at the 300 or 400 level, and at least two of those must be at the 400 level. (40-398, 40-399, 40-498 and 40-499 do not count as fulfilling the 300 and 400 level requirements; only one of 40-489 or 40-495 may be used to satisfy the 400 level requirement.)

Other requirements:
(a) 01-150, 01-151;
(b) additional options if required

Combined Honours Digital Journalism and English Language and Literature

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the Option requirements, in the order presented, followed by any additional requirements under Other requirements, to a total of forty courses. Example: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the Option requirements and one course from section (b) of the Option requirements should be excluded from the degree requirements.

Total courses: forty.

Major requirements – Digital Journalism:
Sixteen courses, including:
(a) Seven DJ core courses: 30-125, 30-120, 30-230, 30-225, 30-222, 30-320, 30-220
(b) Six semesters of studio courses: 30-140, 30-240, 30-340 (2 semester course), 30-440 (2-semester course including project)

(c) three from 26-302, 26-304, 26-307, 26-399, 45-201, 45-213, 45-378, 45-379, 40-201, 40-243, 40-301, 40-360, 40-370

Major requirements – English Language and Literature:
Sixteen courses, including:
(a) 26-120, 26-210, 26-211
(b) 26-260* or 26-270;
(c) One of 26-290, 26-291, or 26-293;
(d) two Category A courses;
(e) one course from each of Categories B through E;
(f) Two 400-level courses, or one 400-level course and one "practicum" course. Recommended: 26-309 (Scholarship and Bibliography);
(g) one of 26-280, 26-285, 26-290, 26-301, 26-354, 26-383;
(h) two* additional English courses.

*If 26-260 is used to satisfy both (b) above and the Category C requirement under (e), for the major requirements, the student must take one additional course under (h) to bring the total number of English courses up to the required sixteen for the degree program.

Option requirements: six courses, including:
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150;
(b) additional courses from any area of study to a total of forty courses.

Combined Honours Digital Journalism and English Literature and Creative Writing

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the Option requirements, in the order presented, followed by any additional requirements under Other requirements, to a total of forty courses. Example: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the Option requirements and one course from section (b) of the Option requirements should be excluded from the degree requirements.
Total courses: forty.

Major requirements – Digital Journalism:
Sixteen courses, including:
(a) Seven DJ core courses: 30-125, 30-120, 30-230, 30-225, 30-222, 30-320, 30-220
(b) Six semesters of studio courses: 30-140, 30-240, 30-340 (2 semester course), 30-440 (2-semester course including project)
(c) three from 26-302, 26-304, 26-307, 26-399, 45-201, 45-213, 45-378, 45-379, 40-201, 40-243, 40-301, 40-360, 40-370

Major requirements- English and Creative Writing:
Sixteen courses, including:
(a) 26-120, 26-210, 26-211 (Students are encouraged to take 26-210 and 26-211 in their first year.);
(b) 26-260 or 26-270;
(c) 26-290, 26-291, or 26-293;
(d) 26-203 (a 6.0-credit course) and 26-498 (a 6.0-credit course);
(e) 26-304;
(f) one Category A course;
(g) one from each of Categories B through D;
(h) one of 26-280, 26-285, 26-290, 26-301, 26-354, 26-383.
(i) one* additional English course

Recommended: 26-305 (Editing Practicum).

*If 26-260 is used to satisfy both (b) above and the Category C requirement under (g), for the major requirements, the student must take one additional course under (i) to bring the total number of English courses up to the required sixteen for the degree program.

Option requirements: six courses, including:

(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150;
(b) additional courses from any area of study to a total of forty courses.

Combined Honours Digital Journalism and Political Science

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements-Digital Journalism: sixteen courses, including:
(a) 30-140, 30-240 , 30-340 (6.0 credit course taken over 2 semesters), 30-440 (6.0 credit course taken over 2 semesters)
(b) 30-125, 30-120, 30-230, 30-222,30-220, 30-225, 30-320.
(c) three from 26-302, 26-304, 26-307, 26-399, 45-201, 45-213, 45-378, 45-379, 40-201, 40-243, 40-301, 40-360, 40-370

Option requirements: six courses including
(a) two courses from Languages or Science;
(b) two courses from Arts
(c) two courses from any area of study, excluding Social Sciences.

Major requirements-Political Science: fourteen courses, including:
(a) 45-100, 45-130, 45-160, 45-251 or 45-252 and 45-275;
(b) one of 45-201, 45-211, 45-212, 45-213, 45-220, 45-309, 45-314, or 45-321;
(c) eight additional courses of which at least three must be at the 400 level;

Other requirements:
(a) 01-150, 01-151;
(b) 02-250;
(c) additional options if required.

INTER-FACULTY PROGRAMS:
Arts and Sciences
Environmental Studies
Forensics

ARTS AND SCIENCE: COURSES
COMMUNICATION, MEDIA AND FILM: COURSES
DIGITAL JOURNALISM: COURSES
ENGLISH: COURSES
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DRAMATIC ART

PROGRAMS
General Bachelor of Arts in Drama *(Note: As of Fall 2014, there are no direct admissions from High School. Students will be applying directly to the Honours program.)*
Bachelor of Arts (Honours Drama)
Bachelor of Arts (Honours Drama in Education and Community)
Bachelor of Arts (Combined Honours Programs)
Bachelor of Arts (Honours Drama and Communication Studies, Media and Film)
Bachelor of Fine Arts in Dramatic Art: Acting
Major and Minor Concentrations - Bachelor of Arts and Science

Additional Information: GENERAL UNDERGRADUATE REGULATIONS
Dramatic Art Transfer Credit Regulation (for workshop/classes offered by theatre/production professionals) **(See Advanced Standing and Credit Transfer Policy, #8)**

General Bachelor of Arts in Drama
(Note: As of Fall 2014, there are no direct admissions from High School. Students will be applying directly to the Honours program.)

Total courses: thirty.

Major requirements: ten courses, including 24-100 and 24-200; plus one course from each of groups A, B, and C; and five additional Dramatic Art courses as chosen in consultation with a Dramatic Art program advisor.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) six courses from Arts, Languages, Social Sciences, and Science, including Dramatic Art;
(c) six courses from any area of study, excluding Dramatic Art.

Bachelor of Arts (Honours Drama)

Total courses: forty.

Major requirements: twenty courses, including 24-100 and 24-200; plus one course from each of groups A, B, and C; and fifteen additional Dramatic Art courses as chosen in consultation with a Dramatic Art program advisor.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) 26-122 and 26-123, or two English options as recommended by an advisor in Dramatic Art;
(c) four courses from Arts, Languages, Social Sciences, and Science, including Dramatic Art;
(d) six courses from any area of study, excluding Dramatic Art.

Bachelor of Arts (Honours Drama in Education and Community)

This program is designed for those students interested in pursuing future careers in the educational and developmental fields such as elementary classroom teachers and secondary theatre arts teachers; special education teachers; drama

consultants; play and recreational leaders in the community; and specialists in theatre for young audiences.

Field work will be assigned only if a student is assessed to have suitable personal qualities as well as academic qualifications.

Students wishing to obtain certification from the Ontario College of Teachers must enrol in a Faculty of Education and Academic Development upon the successful completion of this program.

Drama in Education and Community students may select options in Visual Arts. To do so, they must apply to Visual Arts during the Winter term of their first year. Their requests will be reviewed by interview and/or portfolio.

A concentration of six courses in a second teachable subject is advisable for students wishing to apply to a Faculty of Education and Academic Development. Students wishing to pursue a career in teaching are strongly advised to consult an academic advisor.

ADMISSION REQUIREMENTS

1) All candidates must meet the requirements for admission to the University of Windsor.
2) In addition, an interview and workshop will be required.
3) enrollment is limited.

PROGRAM REQUIREMENTS

Total courses: forty.

Major requirements: twenty courses, including 24-100, 24-160, 24-161, 24-200, 24-225, 24-260, 24-261, 24-277, 24-284, 24-360, 24-371, 24-267, and 24-479; plus two of 24-378, 24-470, 24-471, and 24-479; and five additional Dramatic Art courses to be identified in consultation with a Dramatic Art program advisor.

Option requirements: six courses including
(a) two courses from Social Science;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) two English courses. (Recommended: 26-122, and 26-123);
(c) two Psychology courses: Required: 46-115, 46-116)
(d) eight additional courses from any area of study.

STANDING REQUIRED

In addition to complying with the general university regulations (Standing Required for Continuation in Programs: Cumulative Average Requirement: 60%; Major Average Requirement: 70%), in order to advance in the Drama in Education and Community program, students must obtain a minimum grade of 63% in all Dramatic Art courses.

Under exceptional circumstances, and with permission of the Academic Standing Committee, a student may be permitted to upgrade. If the student obtains a grade of 63% or better in the deficient course(s), and a major average of 70% or better, the student may be re-interviewed for the Drama in Education and Community program.

Grades will be reviewed at the end of each semester, and students who do not achieve the minimum grade of 63% in all Dramatic Art courses will be required to withdraw from the program. These students may transfer into the B.A. Drama program.

Bachelor of Arts (Combined Honours Programs)

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course

from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements - Dramatic Art: sixteen courses as recommended by a Dramatic Art program advisor including at least one at the 300 level or above.

Major requirements - Other Subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) additional courses from any area of study to a total of forty courses.

Bachelor of Arts (Honours Drama and Communication, Media, and Film)

Total courses: forty.

Major requirements - Dramatic Art: sixteen courses, including 24-100 and 24-200, 24-421, plus one course from each of groups A, B, and C; and ten additional Dramatic Art courses as chosen in consultation with a Dramatic Art program advisor.

Major requirements - Communication, Media, and Film: sixteen courses including 40-101, 40-234, 40-275, plus one of 40-201, 40-225, 40-334 or 40-375, plus twelve additional courses, at least three of which must be at the 300 or 400 level, and at least two of those must be at the 400 level. (40-398, 40-399, 40-498 and 40-499 do not count as fulfilling the 300 and 400 level requirements; only one of 40-489 or 40-495 may be used to satisfy the 400 level requirement.

Other requirements:
(a) 01-150, 01-151;
(b) two courses from Languages or Science;
(c) three additional options, excluding Dramatic Art and Communication, Media and Film;
(d) one course at the 300 level or above from any area of study, including Dramatic art and Communication Media and Film.

NOTE: With the permission of the Department Head, up to two courses not offered or not cross-listed by the Department of Communication, Media, and Film may be used to satisfy the Major requirement for Honours Communication, Media, and Film degrees, provided a significant portion of the course content covers topics from communication, media, or film.

Bachelor of Fine Arts (BFA) in Dramatic Art - Acting

The Bachelor of Fine Arts (Acting) program is available only to those who have successfully auditioned and been invited to study for an eventual career in the professional theatre. This intensive program requires four years of study. Students develop performance techniques through courses in acting, voice, interpretation, improvisation, and movement. They are also exposed to training from professional Canadian theatre artists who conduct workshops ranging in length from one day to six weeks. All B.F.A. (Acting) students participate in University Players productions. This professional program is designed for those students wishing to pursue a career in professional theatre, television, or film. It is also designed to prepare students to pursue graduate work and related arts. Transfer credit articulation agreements with the National Theatre School, Humber College, and George Brown College may allow graduates of their three-year Theatre Performance programs to obtain advanced standing.

Total courses: forty-four.

Major requirements: thirty-two courses, consisting of 24-100, 24-120, 24-121, 24-126, 24-127, 24-128, 24-129, 24-130, 24-200, 24-220, 24-221, 24-223, 24-224, 24-226, 24-227, 24-228, 24-230, 24-321, 24-322, 24-323, 24-324, 24-326, 24-327, 24-330 and 24-333, 24-344, 24-420, 24-429, and 24-451; plus two courses from the range of 24-453 to 24-458; and one additional, non-core Dramatic Art courses to be identified in consultation with a faculty advisor.

Other requirements:
(a) 01-150, 01-151;
(b) two of 11-212, 26-122, 26-123, 26-326, 26-327, 26-328, or 26-356;
(c) two additional English courses, including any not already selected from the previous list;
(d) two courses from any area of study, excluding Dramatic Art;
(e) three courses from any area of study, including Dramatic Art;
(f) 24-275***.

***24-275 will not be counted in the major average for the BFA.

In addition to complying with the general university regulations (Standing Required for Continuation in Programs: Cumulative Average Requirement: 60% Major Average Requirement: 70%), in order to advance in the BFA program, students must obtain a minimum grade of 63% in all Dramatic Art courses.

Under exceptional circumstances, and with permission of the Academic Standing Committee, a student may be permitted to upgrade. If the student obtains a grade of 63% or better in the deficient course(s), and a major average of 70% or better, the student may re-audition for the BFA program.

Grades will be reviewed at the end of each semester, and students who do not achieve the minimum grade of 63% in all Dramatic Art courses will be required to withdraw from the program. These students may transfer into the BA Dramatic Art program.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 24-100; 24-200; one courses from each of Category A, B, and C; seven course selected in association with a Dramatic art advisor.

Minor Concentration: 24-330, 24-333, four additional courses. (No more than two courses at the 100-level.)

ADDITIONAL INFORMATION
Requirements for degree programs in Dramatic Art make reference to the following groups of courses:

Group A-Performance Related Courses: 24-225, 24-235, 24-244, 24-277, 24-278, 24-284, 24-310, 24-325, 24-344, 24-351, 24-352, 24-384, 24-421, and 24-449.
Group B-Theatre History Courses: 24-130, 24-230, 24-330, 24-333, 24-439, and 24-469.
Group C-Technical/Design Courses: 24-115, 24-117, 24-118, 24-211, 24-311, 24-213, 24-215, 24-216, 24-217, 24-315, 24-317, 24-250, 24-319, and 24-452.

OTHER REGULATIONS
1) Dramatic Art 24-100 (The Nature of Theatre I) and 24-200 (The Nature of Theatre II) are requirements for all first-year Dramatic Art majors.
2) Non-majors wishing to take a Dramatic Art course as an option may enter Dramatic Art courses (with the exception of those which are further restricted only to B.F.A. Acting or Drama in Education and Community students) only with the consent of the instructor.
3) Only 3rd and 4th year students may enrol in Production Problems with the consent of the Director of the School. Dramatic Art students may enrol in Directed Studies courses only with the consent of the instructor.
4) B.F.A. students may not proceed to the next level without completing all core Dramatic Art course requirements of the previous level. Performance courses must be taken in sequence.
All students majoring in Dramatic Art programs are strongly advised to seek academic advising prior to registration each term.

UNIVERSITY PLAYERS
University Players is a serious and dedicated training ground for young theatre artists. It is a venue where faculty, staff, and guest artists find an opportunity for creative expression and showcase professional-calibre content and conduct. All Dramatic Art programs come together at University Players. First-year students learn the backstage and front-of-house operation of the theatre as members of running crews for productions. In later years, students work in the areas that correspond to their chosen B.A. or B.F.A. degree programs. University Players produces fifty-five performances of six plays annually, to a total of 15,000 audience members.

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ECONOMICS

PROGRAMS

Bachelor of Arts (Economics)
Bachelor of Arts (Honours Economics)
Bachelor of Science (Honours Economics)
Bachelor of Arts (Combined Honours Economics)
Bachelor of Science (Combined Honours Economics)
Minor in Economics
Major and Minor Concentrations - Bachelor of Arts and Science

Additional Information: GENERAL UNDERGRADUATE REGULATIONS

Bachelor of Arts (Economics)

Total courses: thirty.

Major requirements: eleven courses, including 41-110, 41-111, 41-212, 41-221, and 41-231; and six 200-, 300- or 400-level courses. (With the approval of a program advisor, equivalent statistics courses may be substituted for 41-212.)

Other requirements:
(a) 02-250, or 65-205;
(b) eight courses from outside Social Sciences with at least two from Arts/Languages and two from Sciences;
(c) four courses from any area of study including Economics;
(d) six courses from any area of study excluding Economics.

RECOMMENDED COURSE SEQUENCING:

Fall: Year 1
41-110
Elective (1)
Elective (2)
Elective (3)
Elective (4)

Winter: Year 1
41-111
Elective (5)
Elective (6)
Elective (7)
Elective (8)

Fall: Year 2
41-221*
41-231
65-250 (or 65-205; see below)*
Elective (9)
Elective (10)

Winter: Year 2
41-212 (see above)
Economics Elective (1)
Economics Elective (2)
Elective (11)
Elective (12)

Fall: Year 3
Economics Elective (3)
Economics Elective (4)
Elective (13)
Elective (14)
Elective (15)

Winter: Year 3
Economics Elective (5)

Economics Elective (6)
Elective (16)
Elective (17)
Elective (18)

Notes: In the Winter term of the first year, a student who had successfully completed 41-110 could take 41-221 in place of an elective, and thus add an elective in the Fall term of his or her second year.

Bachelor of Arts (Honours Economics)

Total courses: forty.

Major requirements: twenty courses in Economics including 41-110, 41-111, 41-212 (or 65-251), 41-221, 41-222, 41-231, 41-232, 41-306, 41-313, 41-414, 41-423, 41-433, 41-407 and seven additional courses, at least five of which have to be at the 300- or 400- level.

Other Requirements:
(a) 62-120 (or 62-125 or 62-126), 62-140 (or 62-139), and either 65-205 or 65-250 (if taking 65-250, the student must take 62-141 as an elective and as a prerequisite for 65-250) ;
(b) seventeen courses from any area of study, of which a maximum of two may be from Economics.

RECOMMENDED COURSE SEQUENCING:

Fall: Year 1
41-110
62-140 (or 62-139)
62-120 (or 62-125)
Elective (1)
Elective (2)

Winter: Year 1
41-111
62-141* (see below)
Elective (3)
Elective (4)
Elective (5)

Fall: Year 2
41-221
41-231
65-250 (or 65-205; see below)*
Elective (6)
Elective (7)

Winter: Year 2
41-222
41-232
41-212 (or 65-251)
Elective (8)
Elective (9)

Fall: Year 3
Economics Elective (1)
Economics Elective (2)
Elective (10)
Elective (11)
Elective (12)

Winter: Year 3
41-306
Economics Elective (3)
Economics Elective (4)
Elective (13)
Elective (14)

Fall: Year 4
41-313
41-423

41-433
Economics Elective (5)
Elective (15)

Winter: Year 4
41-414
41-407
Economics Elective (6)
Economics Elective (7)
Elective (16)

Notes: If 65-205 is chosen instead of 65-250, 62-141 is not required and may be replaced by 'Elective 17'. Still, 65-250 is recommended.In the Winter term of the first year, a student who had successfully completed 41-110 could take 41-221 in place of an elective, and thus add an elective in the Fall term of his or her second year. Also, conditional on satisfying the prerequisites, a student could move 41-313 and 41-414 from the fourth year to the third year.

Bachelor of Science (Honours Economics)

Total courses: forty.

Major requirements: twenty courses in Economics including, 41-110, 41-111, 41-212 (or 65-251), 41-221, 41-222, 41-231, 41-232, 41-306, 41-313, 41-414, 41-423, 41-433, 41-406, 41-424, 41-434, and five Economics elective courses at the 300 or 400 level.

Other requirements:
(a)60-104, 62-120 (or 62-125 or 62-126), 62-140 (or 62-139), 62-141, 62-190, 65-250, plus one additional course (200-level or higher) from the Department of Mathematics and Statistics.
(b)An additional 13 courses, a maximum of which two may be Economics courses.

RECOMMENDED COURSE SEQUENCING:

Fall: Year 1
41-110
62-140 (or 62-139)
62-120 (or 62-125)
Elective or 60-104 (1)
Elective (2)

Winter: Year 1
41-111
62-141
62-190
Elective or 60-104 (1)
Elective (3)

Fall: Year 2
41-221
41-231
65-250
Elective (4)
Elective (5) x

Winter: Year 2
41-222
41-232
41-212 (or 65-251)
Elective (6)
Elective (7)

Fall: Year 3
Economics Elective (1)
Economics Elective (2)
Math or Stats Elective
Elective (8)
Elective (9)

Winter: Year 3
41-306
Economics Elective (3)

Elective (10)
Economics Elective (4)
Elective (11)

Fall: Year 4
41-313
41-423
41-433
41-406
Elective (12)

Winter: Year 4
41-414
41-424
41-434
Economics Elective (5)
Elective (13)

Notes: A maximum of two 'elective' courses may be from Economics.In the Winter term of the first year, a student who had successfully completed 41-110 could take 41-221 in place of an elective, and thus add an elective in the Fall term of his or her second year. Conditional on satisfying the prerequisites, a student could move 41-313 and 41-414 from the fourth year to the third year.

Bachelor of Arts (Combined Honours Programs)

Total courses: forty.

Major requirements-Economics: thirteen courses in Economics including 41-110, 41-111, 41-212 or (65-251), 41-221, 41-222, 41-231, 41-232 and six additional in Economics, at least four of which have to be at the 300- or 400- level.

Major requirements-Other Subject: as prescribed by that area of study.

Other requirements: 65-205 (or 65-250) plus additional options to a total of forty.

The critical requirement for the four-year Economics Honours is the inclusion of Economics 41-110 and 41-111 in the first year of the program. Similarly Economics 41-221, 41-222, 41-231, and 41-232 should be included in the second year of the program.
Students intending to specialize in Economics in a four-year Honours program should satisfy the Mathematics requirements as early as possible in the program.

Bachelor of Science (Combined Honours Programs)

Bachelor of Science honours programs combining Economics with a second Honours area of study will consist of:

Total courses: forty.

Major requirements-Economics: fifteen courses: 41-110, 41-111, 41-212 or 65-251*, 41-221, 41-222, 41-231, 41-232, 41-306, 41-313, 41-406, 41-414, 41-423, 41-424, 41-433 and 41-434.

Major requirements-Other Subject: as prescribed by that area of study.

Other requirements:
a) 62-120 or 62-125 or 62-126, 62-139 or 62-140, 62-141, 62-190, 65-250 and one additional course* from the Department of Mathematics & Statistics (62- or 65-) at the 200-level or higher.
b) additional courses, if necessary, from any area of study to a total of forty courses.

* 65-251 is required if Mathematics and Statistics is the other subject. Also, 65-251 may be the 'additional course' in [a] above.

Minor in Economics

A minor shall consist of 41-110, 41-111, 41-221, 41-231, and two additional Economics courses. A minimum average of 60% or better is required in all six courses.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 41-212, 41-221, 41-222, 41-231, 41-232, 41-313, 41-414, 41-423, 41-433, ; three additional courses at the 300-level or above. (If Gen Sci. Major 41-424 and 41-434 are required.) (Other requirements: 41-110, 41-111, 65-205.)

**(Note: If a student is considering graduate studies in Economics they should take 62-140 (BAS core), 62-141 (BAS core), 65-250 (replaces core 65-205) and 65-251 (replaces 41-212) and 41-424 and 41-434 (replaces two of the three additional 300 level or above), and one additional Economic course at the 300 level or above (replaces 62-130.)*

Minor Concentration: 41-212, 41-221, 41-222, 41-231, 41-232; one 300-level or above course.

Other requirements: 41-110, 41-111, 65-205.

ECONOMICS: COURSES

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ELECTRICAL AND COMPUTER ENGINEERING

PROGRAMS
Bachelor of Applied Science in Electrical Engineering

CERTIFICATE
Honours Certificate in Electrical Engineering

Additional Information: Electrical Engineering Program Regulations and Information
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GENERAL UNDERGRADUATE REGULATIONS

Bachelor of Applied Science in Electrical Engineering

OUTLINE OF STUDIES
Note: All students will follow the sequence of study terms shown in their program of study.

FIRST YEAR
Common to all Engineering programs

Fall Term
85-111.Engineering Mechanics I
85-133.Engineering and Design
62-140.Differential Calculus
62-126.Linear Algebra
85-118. Engineering and the Profession

First Year
Students who wish to enter into the Electrical Engineering program will have to declare their major in this semester and register for the following courses.

Winter Term
85-120.Engineering Thermofluids
62-141.Integral Calculus
64-141.Intro. Physics II
59-110.Topics General Chemistry
85-119. Technical Communications

SECOND YEAR
Students must have completed at least nine (9) of their 1st year courses before being allowed to register into the 2nd year courses including all pre-requisite courses required for registration into the 2nd year courses.

Fall Term
88-211.Computer-Aided Analysis
88-214.Circuit Analysis
85-222.Treatment of Expt. Data
62-215.Vector Calculus
62-216.Differential Equations
64-220.EM Fields and Photons

Winter Term
88-217.Digital Logic Design I
88-224.Signals and Systems
88-225.Physical Electronics
88-226.Electronics I
88-228.EM Waves and Rad. Syst.
Non-Technical Elective*

Summer Term Co-op students only
85-298. Work Term I

THIRD YEAR
Students must have completed all the 1st year courses and at least ten 10 of their 2nd year courses before being allowed to register into the 3rd year courses

courses including all pre-requisite courses required for registration into the 3rd year courses.

****** Students opting for the Integrated BASc/MASc program:***

> *The Faculty of Engineering offers a Bachelor's/Master's Integrated Engineering Degree program which allows students with outstanding academic ability to achieve both a B.A.Sc. and M.A.Sc. degree in a time period as short as five years. This program treats the educational process through the B.A.Sc. to the M.A.Sc. degree as a single coherent integrated whole, while ensuring that the requirements for both degrees are fully satisfied. This structured program represents a complementary alternative to the existing separate undergraduate and graduate degree programs.*
>
> *Application to the Integrated B.A.Sc./M.A.Sc. can be made early in the Winter semester of the student's third year of undergraduate B.A.Sc. study. Normally, only applicants who have a cumulative average of at least 77%, and a semester average of 77% in the Fall semester of their third year of undergraduate B.A.Sc. study may be granted admission to the integrated program which confers conditional admission status to the M.A.Sc. program.*

Fall Term
85-313.Engrg. Economics
88-313.Electromech. Sys. I
88-316.Electronics II
88-330.Dig. Logic Design II
Technical or Non-Technical Elective*

Winter Term
Co-op students only
85-398. Work Term II

Summer Term
88-324.Control Syst. I
88-327 Microprocessors
88-329.Analog Comm.
Technical or Non-Technical Elective
Select one course from the list below:

> 34-129 Contemporary Moral Issues
> 45-160 Issues in World Politics (section must cover topics of environmental stewardship; sustainable development)
> 34-228 Technology, Human Values and the Environment
> 45-212 Environmental Policy and Politics
> 27-385 The Green Corridor
> 66-201 Science, Technology and Society
> 66-213 Geology and the Environment
> 67-200 Principles of Resource Management

*Students must select a total of one technical and one non-technical elective during the third year from the approved list available in the Department.

FOURTH YEAR

Students cannot register into any of the 4th year courses until all Electrical Engineering courses from 1st , 2nd and 3rd year have been completed.
4rth year students are required to take a total of five technical electives in 4th year.

*Fall Term*Co-op students only
85-498. Work Term III

Winter Term
Core Subjects - All Students
88-400.Capstone Design Project
88-431.Control Systems II
88-457. Fundamentals of Digital Signal Processing

Electives Select electives from the list below
[Students opting for the Integrated BASc/MASc program will need to register in two graduate courses spread over the Winter-Summer terms (one graduate course per term). Admission requirements for the Integrated BASc/MASC are

shown in the third year course sequence.]
88-419. Digital Communications
88-436.Computer Communications
88-437 .Intelligent Computing
88-443. Embedded Sys. Design
88-444. Analog Int. Circuit Design
88-445. Power Electronics
88-448. Digital Comp. Arch.
88-449. Automotive Sensors
88-450 Power Systems I

Summer Term
Core Subjects - All Students
85-421.Engineering and Society
88-400.Capstone Design Project
88-432.EM waves and Rad. Sys. II

Electives Select electives from the list below
[For the students who are registered in the Integrated BASc/MASc program see the conditions outlined in the 4th year Winter semester.]
88-433.Digital Integrated Circuits
88-434.Automotive Electronics
88-435.Microelectromech. Systems
88-438.Coding and Info. Theory
88-439.Multimedia Systems
88-440.Wireless Communications
88-447.Comp. Networks & Security
88-460 Power Systems II

Taking courses out of sequence can be allowed for special cases transfers, advanced credit, etc. at the discretion of the Department Head.

Upon request, the Department will provide students with letters indicating that they have completed an area of specialization based on the successful completion of the following cluster of courses:

Students who wish to specialize in:

Electronics, are recommended to include the following courses in their selection of electives:

Winter:
88-444 Analog Integrated Circuit Design
88-445 Power Electronics

Summer:
88-433 Digital Integrated Circuits
88-435 Microelectromechanical Systems

Communications, are recommended to include the following courses in their selection of electives:

Winter:
88-419 Digital Communications
88-436 Computer Communications

Summer:
88-438 Coding and Info. Theory
88-440 Wireless Communications

Automotive Electronics, are recommended to include the following courses in their selection of electives:

Winter:
88-443 Embedded System Design
88-449 Automotive Sensors

Summer:
88-434 Automotive Electronics
88-435 Microelectromechanical Systems

Computer Engineering, are recommended to include the following courses in their

selection of electives:

Winter:
88-443 Embedded System Design
88-448 Digital Computer Architecture

Summer:
88-439 Multimedia Systems
88-447 Computer Networks and Security

Honours Certificate in Electrical Engineering

Admission Requirements: A candidate for the Honours Certificate in Electrical Engineering shall hold the degree of Bachelor of Applied Science (B.A.Sc.) or a four-year B.Sc. (or BCS) degree in Computer Science or in Physics.

Total courses: Eight

Major requirements:
(a) a minimum of 6 courses from our 4th year elective courses
(b) a maximum of 2 courses from our 3rd year and
(c) a maximum of 1 course from 2nd year
All selected courses should not be from courses, subjects or topics that were part of the applicant's undergraduate studies.

To qualify for the certificate, students will be required to successfully complete all 8 courses at the University of Windsor. No transfer credit will be considered for this certificate.

ELECTRICAL AND COMPUTER ENGINEERING: COURSES (88-)

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ENGLISH LANGUAGE, LITERATURE, AND CREATIVE WRITING

PROGRAMS
General English Language and Literature
Honours English Language and Literature
Honours English Literature and Creative Writing
Combined Honours English Language and Literature
Combined Honours English Literature and Creative Writing
Combined Honours Digital Journalism and English Language and Literature *(Housed in Inter-faculty programs)*
Combined Honours Digital Journalism and English Literature and Creative Writing *(Housed in Inter-faculty programs)*
Minor in English Language and Literature
Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Additional Information: ENGLISH PROGRAM REGULATIONS
GENERAL UNDERGRADUATE REGULATIONS

General English Language and Literature

Total courses: thirty.

Major requirements: twelve courses, including:
(a) 26-120, 26-210, and 26-211 (Students are encouraged to take 26-210 and 26-211 in their first year.);
(b) 26-260 or 26-270;
(c) one other 200-level course;
(d) one course from each of Categories A through E. (Only one of 26-326 or 26-327 counts toward Category A.);
(e) two additional English courses

*If 26-260 is used to satisfy both (b) above and the Category C requirement under (d), for the major requirements, the student must take one additional course under (e) to bring the total number of English courses up to the required twelve for the degree program.
26-203, 26-315, 26-325, 26-340, 26-345, and 26-498 are all double-credit (6.0 credit) courses.

Option requirements: six courses, including:
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150;
(b) four courses from any area of study, including English;
(c) seven courses from any area of study, excluding English.

Honours English Language and Literature

Total courses: forty.

Major requirements: twenty courses, including:
(a) 26-120, 26-210, 26-211 (Students are encouraged to take 26-210 and 26-211 in their first year.);
(b) 26-260 or 26-270;
(c) one of 26-290, 26-291, or 26-293;
(d) two Category A courses; (Only one of 26-326 or 26-327 counts toward Category A.);
(e) one course from each of Categories B through E;
(f) one Practicum course (26-302, 26-305,* 26-306,* 26-307,* 26-309**) or a 400-level course.
(g) one more 400-level course;
(h) one of 26-280, 26-285, 26-290, 26-301, 26-354, 26-383;
(i) six additional English courses.

* practicum courses 26-305*, 26-306*, 26-307* require application for entry.
** 26-309 (Scholarship and Bibliography) recommended for all Honours English

majors

***If 26-260 is used to satisfy both (b) above and the Category C requirement under (e), for the major requirements, the student must take one additional course under (g) to bring the total number of English courses up to the required twenty for the degree program.
26-203, 26-315, 26-325, 26-340, 26-345, and 26-498 are all double-credit (6.0 credit) courses.

Option requirements: six courses, including:
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150;
(b) four courses from any area of study, including English;
(c) nine courses from any area of study, excluding English.

Honours English Literature and Creative Writing

Total courses: forty.

Major requirements: twenty courses, including:
(a) 26-120, 26-210, 26-211 (Students are encouraged to take 26-210 and 26-211 in their first year.);
(b) 26-260 or 26-270;
(c) one of 26-290, 26-291, or 26-293;
(d) 26-203 (a 6.0-credit course) and 26-498 (a 6.0-credit course);
(e) 26-304**; plus one of 26-302, 26-305*, 26-306*, 26-307* or 26-309 (recommended)
(f) two Category A courses; (Only one of 26-326 or 26-327 counts toward Category A.);
(g) one course from each of Categories B through E;
(h) one of 26-280, 26-290, 26-301, 26-354, 26-383;
(i) two additional English courses.

* practicum courses 26-305*, 26-306*, 26-307* require application for entry. See English Department web-site for details.
** 26-304 may be repeated for credit
*** 26-309 (Scholarship and Bibliography) recommended for all Honours English majors
****If 26-260 is used to satisfy both (b) above and the Category C requirement under (g), for the major requirements, the student must take one additional course under (g) to bring the total number of English courses up to the required twenty for the degree program.
26-203, 26-315, 26-325, 26-340, 26-345, and 26-498 are all double-credit (6.0 credit) courses.

Option requirements: six courses, including:
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150;
(b) four courses from any area of study, including English;
(c) nine courses from any area of study, excluding English.

Combined Honours English Language and Literature

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements: seventeen courses, including:
(a) 26-120, 26-210, 26-211
(b) 26-260* or 26-270;
(c) One of 26-290, 26-291, or 26-293;
(d) two Category A courses; (Only one of 26-326 or 26-327 counts toward Category A.);
(e) one course from each of Categories B through E;
(f) Two 400-level courses, or one 400-level course and one “practicum” course. Recommended: 26-309 (Scholarship and Bibliography);
(g) one of 26-280, 26-285, 26-290, 26-301, 26-354, 26-383;
(h) three* additional English courses.

*If 26-260 is used to satisfy both (b) above and the Category C requirement under (e), for the major requirements, the student must take one additional course under (h) to bring the total number of English courses up to the required seventeen for the degree program.
26-203, 26-315, 26-325, 26-340, 26-345, and 26-498 are all double-credit (6.0 credit) courses.

Major requirements -Other Subject: as prescribed by that area of study.

Option requirements: six courses, including:
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150;
(b) additional courses from any area of study to a total of forty courses.

*If 26-260 is used to satisfy both a 200-level requirement and the Category C requirement, the student must take one additional course under (g) to bring the total number of English courses up to the required seventeen for the degree program.

Combined Honours English Literature and Creative Writing

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements: seventeen courses, including:
(a) 26-120, 26-210, 26-211 (Students are encouraged to take 26-210 and 26-211 in their first year.);
(b) 26-260 or 26-270;
(c) 26-290, 26-291, or 26-293;
(d) 26-203 (a 6.0-credit course) and 26-498 (a 6.0-credit course);
(e) 26-304;
(f) one Category A course; (Only one of 26-326 or 26-327 counts toward Category A.);
(g) one from each of Categories B through D;
(h) one of 26-280, 26-285, 26-290, 26-301, 26-354, 26-383.
(i) two additional English courses

Recommended: 26-305 (Editing Practicum).

*If 26-260 is used to satisfy both (b) above and the Category C requirement under (g), for the major requirements, the student must take one additional course under (i) to bring the total number of English courses up to the required seventeen for the degree program.
26-203, 26-315, 26-325, 26-340, 26-345, and 26-498 are all double-credit (6.0 credit) courses.

Major requirements - Other Subject: as prescribed by that area of study.

Option requirements: six courses, including:
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150;
(b) additional courses from any area of study to a total of forty courses.

Minor in English Language and Literature

Required: a minimum of six English courses, including:
(a) one literature course at the 100-level;
(b) two courses at the 200-level;
(c) one course at the 300-level;
(d) two more courses numbered 200 or above.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 26-120, 26-210, 26-211, 26-260 or 26-270, one additional 200-level course, one course from each of Categories A-E, two additional courses from Categories A-E.

Minor Concentration: two 100-level courses (one of which must be a literature course and excluding 26-100); plus two courses from Categories A-B and two courses from Categories C-E, one of which must be at the 300-level or above.

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EARTH AND ENVIRONMENTAL SCIENCES

PROGRAMS
Honours Environmental Science without Thesis
Honours Environmental Science with Thesis
Major and Minor Concentrations - Bachelor of Arts and Science
Minor in Earth Science
Minor in Environmental Science
Minor in Geography

Additional Information: GENERAL UNDERGRADUATE REGULATIONS

B.Sc. Honours Environmental Science (without thesis)

Total courses: forty

Major requirements: twenty courses, including 55-210, 55-237, 66-102, 66-141, 66-202, 66-216, 66-224, 66-230, 66-232, and 66-380, plus ten additional courses from: 55-325, 55-430, 55-437, 55-444, 55-445, 55-468, 55-486, 66-221, 66-316, 66-320, 66-328, 66-330, 66-370, 66-402, 66-410, 66-415, 66-436, 66-437, 66-440, 66-441.

Other requirements:
(a) 55-140, 55-141, 59-140, 59-141, 62-130, 65-205, 66-140, 66-300.
(b) Twelve additional courses. Minimum of four courses from the Faculty of Science and a minimum of two courses from any area of study other than Science.

RECOMMENDED COURSE SEQUENCE

First Year: ten courses, including 55-140, 55-141, 59-140, 59-141, 62-130, 65-205, 66-140, 66-141

Second Year: ten courses, including 55-210, 55-237, 66-102, 66-202, 66-224, 66-230, 66-232

Third and Fourth Years: twenty courses, including 66-216, 66-300, 66-380, and ten additional courses from 55-325, 55-430, 55-437, 55-444, 55-445, 55-468, 55-486, 66-221, 66-316, 66-320, 66-328, 66-330, 66-370, 66-402, 66-410, 66-415, 66-436, 66-437, 66-440, and 66-441.

Honours Environmental Science (with Thesis)

Total courses: forty

Major requirements: twenty courses, including 55-210, 55-237, 66-102, 66-141, 66-202, 66-216, 66-224, 66-230, 66-232, 66-380, and 66-499 plus eight additional courses from: 55-325, 55-430, 55-437, 55-444, 55-445, 55-468, 55-486, 66-221, 66-316, 66-320, 66-328, 66-330, 66-370, 66-402, 66-410, 66-415, 66-436, 66-437, 66-440, 66-441.

Other requirements:
(a) 55-140, 55-141, 59-140, 59-141, 62-130, 65-205, 66-140, 66-300.
(b) Twelve additional courses. Minimum of four courses from the Faculty of Science and a minimum of two courses from any area of study other than Science.

RECOMMENDED COURSE SEQUENCE

First Year: ten courses, including 55-140, 55-141, 59-140, 59-141, 62-130, 65-205, 66-140, 66-141

Second Year: ten courses, including 55-210, 55-237, 66-102, 66-202, 66-224, 66-230, 66-232

Third and Fourth Years: twenty courses, including 66-216, 66-300, 66-380, 66-499 and eight additional courses from 55-325, 55-430, 55-437, 55-444, 55-445, 55-468, 55-486, 66-221, 66-316, 66-320, 66-328, 66-330, 66-370, 66-402, 66-410, 66-415, 66-436, 66-437, 66-440, and 66-441.

Major and Minor Concentrations

Major Concentration: 66-140, 66-141, and ten additional 66-XXX courses, except for 66-110, 66-111, 66-201, 66-210, or 66-213. A minimum of three 66-2XX, two 66-3XX and one 66-4XX courses is required.

Minor Concentration: 66-140, 66-141, and four additional 66-XXX courses, except for 66-110, 66-111, 66-201, 66-210, or 66-213.

Minor in Earth Science

A minor in Earth Science consists of 66-140, 66-141, and four courses from: 66-202, 66-224, 66-231, 66-232, 66-327. A 60% must be attained in each course counted toward the minor.

Minor in Environmental Science

A minor in Environmental Science consists of a total of six courses as follows:
(a) 66-141
(b) 55-140 (if not enrolled in a program that includes 55-140 as a major requirement);
(c) Courses chosen from the following list to make up a total of six courses for the minor: 66-102, 66-140, 66-202, 66-216, 66-221, 66-224, 66-230, 66-232, 66-316, 66-320, 66-328, 66-330, 66-370, 66-380, 66-402, 66-410, 66-415, 66-436, 66-437, 66-440, 66-441.
A minimum average of 60% must be attained for all courses counted toward the minor.

Minor in Geography
(Administered by the Department of Earth and Environmental Sciences)

A minor in Geography consists of six courses selected from the following list: 45-238, 45-249, 45-338, 58-100 or 58-110, 58-210, 66-100, 66-102, 66-200, 66-215, 66-216, 66-220, 66-221, 66-230, 66-316, 66-332, 66-334, 66-370, 66-381, 66-402.

Restrictions:
At least one course must be taken from 45-238, 45-249, 58-100 or 58-110, and 58-210. Only two courses can be taken from 66-102, 66-220 and 66-370 A minimum average of 60% must be attained for all courses counted toward the minor.

EARTH AND ENVIRONMENTAL SCIENCES: COURSES
HUMAN GEOGRAPHY: COURSES

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INTER-FACULTY PROGRAMS

Honours Bachelor of Environmental Studies (BES)

This program is truly interdisciplinary in approach and will introduce students to the social, cultural, economic, political, legal, and ethical factors affecting human interaction with the environment while at the same time ensuring they acquire a basic literacy in the physical and biological sciences. Graduates will understand the human dimensions of environmental issues and will be knowledgeable, skilled individuals capable of analyzing complex human-environmental situations and formulating effective political and social strategies to address human impact.

Total Courses: 40

Major requirements:
(a) eighteen courses consisting of 34-227 or 34-228, 34-323 or 48-227, 45-212, 48-340 or 45-249, 55-101 or 55-140, 58-100, 58-210, 66-100, 66-102, 66-141, 66-200, 66-213, 66-215, 66-216, 66-246, 66-332, 66-334, 99-218
(b) plus eight courses from one of the following areas of concentration: Resource Management or Environmental Values and Policy.

Other requirements:
(a) 02-250, 45-120, 48-110, 48-308;
(b) ten courses from any area of study, including either Area of Concentration.

Area of Concentration: Resource Management

At least 3 of the following must be taken: 66-220, 66-221, 66-230, 66-316, 66-381, 66-402

27-385. Green Corridor
34-329. Animals and Ethics
45-335. Political Geography
45-249. Political Economy of Agriculture and Food
48-340. Food and Global Sustainability
55-141. Cell Biology
55-208. Plants and Society
58-470. Special Topics in Environmental Studies
58-480. Environmental Research/Leadership Experience
58-499. Environmental Studies Research Project
59-201. Chemistry in the Marketplace
64-203. Physics and Society –The Present
66-140. Introduction to Earth Science
66-201. Science, Technology and Society
66-210. Introduction to Oceanography
66-214. Geology and International Development
66-220. Climatology
66-221. Environmental Geomorphology
66-230. Hydrology
66-247. Environmental Auditing in Mineral Resource Development
66-316. Environmental Modelling and Decision Analysis
66-381. Field Measurement and Mapping Techniques
66-370. Climate Change
66-402. Remote Sensing
75-100. Introduction to Business

Area of Concentration: Environmental Values and Policy

27-385. Green Corridor
34-227. Environmental Ethics
34-228. Technology, Human Values and the Environment
34-323. Human Rights and Global Justice
34-329. Animals and Ethics
34-330. Environmental Philosophy
45-160. Introduction to International Relations
45-213. Public Opinion, Mass Media and Canadian Democracy
45-214. Legal Process in Canada

45-220. Introduction to Public Administration
45-221. Canadian Public Administration and Policy
45-335. Political Geography
45-249. Political Economy of Agriculture and Food
45-268. International Organization
45-275. Introduction to Research Methods
45-326. Local Government
45-360. International Conflict and its Resolution
45-363. Principles of International Law
48-227. Globalization, Development, and Social Change
48-327. Social Movements
48-340. Food and Global Sustainability
48-352. Citizenship, Rights, and Social Justice
53-320. Women, Power, and Environments (also offered as 48-353)
58-470. Special Topics in Environmental Studies
58-480. Environmental Research/Leadership Experience
58-499. Environmental Studies Research Project
66-381. Field Measurement and Mapping Techniques
75-100. Introduction to Business

Students may take courses from both Areas of Concentration, but at least eight courses must be taken in one of the Areas of Concentration in order to fulfil Major Requirement (b).

If both 34-227 and 34-228 are taken, one course fulfills Major Requirement (a) and the other course contributes to the Environmental Values and Policy Area of Concentration.
If both 34-232 and 48-227 are taken, one course fulfills Major Requirement (a) and the other course contributes to the Environmental Values and Policy Area of Concentration.
If both 45-249 and 48-340 are taken, one course fulfills Major Requirement (a) and the other course contributes to either the Resource Management or the Environmental Values and Policy Area of Concentration.

INTER-FACULTY PROGRAMS:
Arts and Science
Digital Journalism
Forensics

ARTS AND SCIENCE (56-): COURSES
COMMUNICATION, MEDIA AND FILM (40-): COURSES
DIGITAL JOURNALISM (30-) COURSES
ENVIRONMENTAL STUDIES (58-): COURSES
FORENSICS (57-): COURSES
INTER-FACULTY (30-): COURSES

LINK TO ALL COURSES

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INTER-FACULTY PROGRAMS

Honours Bachelor of Forensic Science (BFS)
Combined Honours Bachelor of Arts in Forensics

Honours Bachelor of Forensic Science (BFS)

Forensic Science is the study of evidence in modern criminal investigation for presentation in courts of law. The Bachelor of Forensic Science (Hons.) Program will provide students with an education in both the Arts and the Sciences, with a focus on acquiring the skills and knowledge essential to the practice of professional Forensic Science. The program will enable students to develop as inquisitive researchers, have an understanding of scientific processes and processes and protocols, lab procedures, criminality, judicial systems, (physical) evidence, the significance of high ethical standards, sophisticated interpersonal skills, and effective report writing and public speaking skills.

Total courses: forty.

Major requirements: twenty-seven courses consisting of 01-209; 48-260; 48-110; 55-140; 55-141; 59-140; 59-141; 59-230; 59-261; 62-140; 62-141; 65-205; 64-140; 64-141; 99-219; 57-110; 57-201; 57-210; 57-301; 57-302; 57-303;57-304;57-313; 57-400; 57-401; 57-402; one of the following: 24-210; 34-160; 48-262; or 43-287.

Other requirements:
(a) Ten additional courses from one of the three following areas of concentration: Molecular Biology/Biochemistry; or Biology; or Chemistry. At least six must be at the 300 level or above. The area of concentration must be declared prior to entry of 2nd year studies.
(b) Three open options from outside the area of concentration

Area of Concentration: Molecular Biology/Biochemistry

Required Courses
55-202. Human Anatomy
55-211. Genetics
55-213. Introduction to Molecular Biology
59-320. Analytical Chemistry
59-321. Principles of Instrument. Analysis

and Five of:
55-204. Human Physiology I
55-210. Ecology
55-342. Immunology
55-350. Molecular Cell Biology
55-357. Animal Cells & Tissues
55-485. Nerves, Muscles and Glands
59-362. Metabolism I
59-363. Metabolism II
59-365. Protein and Nucleic Acid Chem
59-468. DNA Science
59-480. Bioinformatics/Genomics/Proteomics

Area of Concentration: Biology

Required Courses
55-210. Ecology
55-211. Genetics
55-324. Population Ecology
55-325. Community Ecology
55-341. Evolution
55-359. Invertebrate Biology

and Four of:
48-215. Principles of Physical Anthropology
48-323. Forensic Anthropology
55-202. Human Anatomy
55-204. Human Physiology I

55-205. Human Physiology II
55-213. Introduction to Molecular Biology
55-357. Animal Cells & Tissues
55-320. Experimental Principles & Design
55-323. Animal Behaviour
55-437. Conservation Biology
55-468. Plant Ecology

Area of Concentration: Chemistry

Required Courses
59-240. Introduction to Physical Chemistry I
59-241. Introduction to Physical Chemistry II
59-250. Introduction to Inorganic Chemistry I
59-251. Introduction to Inorganic Chemistry II
59-320. Analytical Chemistry
59-321. Principles of Instrument Analysis
and 4 of:
59-330. Spectroscopic Structure Identification
59-331. Intermediate Organic Chemistry
59-340. Quantum Chemistry
59-341. Molecular Spectroscopy
59-351. Materials Chemistry
59-365. Protein and Nucleic Acid Chemistry
59-421. Advanced Analytical Chemistry
59-470. Introduction to Computational Chemistry
59-466. Drug Design

PROGRAM SEQUENCING

Year 1
48-101. Principles and Methods of Sociology
55-140. Biological Diversity
55-141. Cell Biology
59-140. General Chemistry I
59-141. General Chemistry II
62-140. Differential Calculus or 62-139. Functions and Differential Calculus
62-141. Integral Calculus
57-201. Introduction to Forensic Science

Year 2
48-260. Introduction to Criminology
65-205. Statistics for the Sciences
59-230. Introductory Organic Chemistry
59-261. Organic Chemistry of Biomolecules
64-140. Introductory Physics I
64-141. Introductory Physics II
4 other courses

Year 3
01-209. Ethics in the Profession
48-262. Administration of Criminal Justice
99-219. Law of Evidence for Forensics
57-301. Laboratory in Forensic Science
57-302. Pro-seminar in Forensic Science
Five other courses

Year 4
57-303. Forensic Identification
57-400. Research and Issues in Forensic Science
57-401. Practicum in Forensic Science
57-402. Research Paper in Forensic Science
Six other courses

Combined Bachelor of Arts in Forensics

The Combined Honours Bachelor of Arts degree in Forensics provides a unique inter-faculty program that combines courses from the arts and social sciences. The program provides training in the identification, collection and presentation of evidence in criminal investigations, as well as an education in a second area of study.

Students wanting to take Criminology as a second major must apply for third year.

Please see admission requirements for Criminology combined majors.

Total courses: forty.

Forensics Major requirements: twenty courses consisting of 01-209; either 34-226 or 43-287; 48-260; 48-110; 48-215; 48-323; 55-140; 55-141; 55-211;62-130; one of 02-250 or 65-205; 57-110; 57-210; 57-201; 57-302; 57-303; 57-304; 57-313; 57-400; 99-219

*When a requirement in the combined Forensics program is also required as part of the course requirements for the other combined major, another course must be selected and substituted into the combined Forensics course requirements in consultation with the Program Chair of Forensic Science and with the approval of the Assistant Provost, Inter-Faculty programs.

Major requirements - other subjects in Arts or Social Sciences: as prescribed by that area of study.

*Other Requirements:*additional options (if required) to a total of forty courses.

RECOMMENDED COURSE SEQUENCING
First Year: ten courses, including: 55-140; 55-141; 57-201; 48-101; 62-130
Second Year: ten courses, including: 55-211; 48-260; 48-215; 65-205 (or 02-250); 01-209
Third Year: ten courses, including: 57-302; 57-303; 57-304; 57-313; 48-323;
Fourth Year: ten courses, including: 99-219; 57-400; 43-287 or 34-226

INTER-FACULTY PROGRAMS:
Arts and Science
Digital Journalism
Environmental Studies
Forensics

INTER-FACULTY MINORS:
Minor in Anthrozoology
Minor in Organizational Learning and Teaching

ARTS AND SCIENCE: COURSES
DIGITAL JOURNALISM: COURSES
ENVIRONMENTAL STUDIES: COURSES
FORENSICS : COURSES
INTER-FACULTY: COURSES

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LANGUAGES, LITERATURES AND CULTURES/LANGUES, LITTÉRATURES ET CULTURES (LLC)

PROGRAMS

GREEK AND ROMAN STUDIES
Honours Greek and Roman Studies (Greek or Latin Option)
Combined Honours Greek and Roman Studies
Minor in Greek and Roman Studies
Major and Minor Concentrations: Greek and Roman Studies

FRENCH STUDIES
General French Studies
Honours French Studies
Combined Honours French Studies
Concurrent Bachelor of Arts in French Studies (Honours)/Bachelor of Education
Minor in French Studies
Major and Minor Concentrations: French Studies

MODERN LANGUAGES
Honours Modern Languages with Year Abroad
Honours Modern Languages and Second-Language Education
Combined Honours Modern Languages
Honours Modern Languages with Two Languages Option
Certificate in Second Language Education
Minor in Modern Languages (Concentration in Language)
Minor in Modern Languages (Concentration in Language and Culture)
Minor in Modern Languages (Concentration in Linguistics and Literature)

BAS Major and Minor Concentrations: Modern Languages
BAS Major and Minor Concentrations: Minor in Linguistics and Literature

ADDITIONAL MINORS
Minor in Arabic Studies
Minor in Jewish Studies

Additional Information: Languages, Literature and Cultures Program Regulations
GENERAL UNDERGRADUATE REGULATIONS

Honours Greek and Roman Studies (Greek or Latin Option)
Total courses: forty.

Major requirements: twenty courses, consisting of four Greek or Latin Language and Literature courses; plus 11-161, 11-162; and fourteen additional Greek and Roman Studies (11-), Greek and Roman History (12-), Greek Language and Literature (13-), or Latin Language and Literature (14-) or Ancient Greek Philosophy course 34-273, including at least one in each of the following four areas:
(a) Art and Archaeology: 11-265, 11-266, 11-450;
(b) Greek and Roman History: 12-262, 12-263, 12-271, 12-272, 12-310;
(c) Literature: 11-211, 11-212, 11-221, 11-222, 11-320;
(d) Mythology and Religion: 11-370, 11-372 .

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Arts or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) four other courses from Arts, Languages, Social Sciences, or Science, including Greek and Roman Studies, Greek and Roman History, Greek Language and Literature, and Latin Language and Literature;
(c) eight courses from any area of study, excluding Greek and Roman Studies, Greek and Roman History, Greek Language and Literature, and Latin Language

and Literature.

Combined Honours Greek and Roman Studies

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

*Major requirements - Greek and Roman Studies:*sixteen courses in Greek and Roman Studies (11-), Greek and Roman History (12-), Greek (13-) or Latin (14-) Language and Literature or or Ancient Greek Philosophy course 34-273, including 11-161 and 11-162; plus four of 13-100, 13-101, 13-200, 13-201, 13-450, 14-100, 14-101, 14-200, 14-201 or 14-450; and at least one course in each of the following four areas:
(a) Art and Archaeology: 11-265, 11-266, 11-450;
(b) Greek and Roman History: 12-262, 12-263, 12-271, 12-272, 12-310;
(c) Literature: 11-211, 11-212, 11-221, 11-222, 11-320;
(d) Mythology and Religion: 11-370, 11-372.

Major requirements-Other Subject: as prescribed by that program.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Arts or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) additional courses from any area of study to a total of forty courses.

Minor in Greek and Roman Studies
Greek and Roman Studies: six courses in Greek and Roman Studies, with no more than four at the 100-level.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS) - Greek and Roman Studies

Major Concentration: 11-162, 07-220, two of 13-100, 13-101, 13-200, 13-201, 14-100, 14-101, 14-200, 14-201, at least one course each in any three of the following areas:
Art and Archaeology: 11-265, 11-266
Greek and Roman History: 12-262, 12-263, 12-271, 12-272
Literature: 11-212, 11-221
Mythology and Religion: 11-370
Plus, any five Classics courses (prefix 11-, 12-, 13-, 14-)
Minor Concentration: six courses in Classics (prefix 11-, 12-, 13-, 14-) with no more than four at the 100-level; and at least one at the 300-level or above.

FRENCH STUDIES

General Bachelor of Arts in French Studies

Total courses: thirty.

Major requirements: sixteen courses, consisting of:
(a) five Literature courses: 29-141; plus one of 29-252, 29-253, 29-255, 29-257, 29-350, 29-353, 29-354, one of 29-356, 29-358; and one of 29-284, 29-383, 29-385. Plus one more 29- (300-level) literature course from the preceding list;
(b) six Language Training courses: 29-121, and 29-122, or 29-123 (double credit); 29-221, and 29-222, or 29-223 (double credit); one of 29-215, 29-315 or 29-317; and one of 29-325, 29-328, 29-329;
(c) three Linguistics courses: 29-230 and 29-231; and one of 29-330, 29-332, 29-333;
(d) one Culture course: 29-260, 29-270, 29-281, or 29-283;
(e) one additional course from any area in French Studies.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Arts or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a)01-150, 01-151:
(b)six courses from any area of study, excluding French.

All courses with the prefix 29- are taught entirely in French. Courses are three hours per week (3.00 credit hours) unless otherwise indicated. Not all courses are offered every year. Please contact the French Studies program at the Department of Languages, Literatures and Cultures office or its web site at www.uwindsor.ca/french to learn which courses will be offered in future years for program planning purposes.
An antirequisite specified in the online course description lists a specific course or level of attainment which, if already successfully completed, does not permit registration for credit in the course.

Language training courses 29-114, 29-121, 29-122 (or 29-123); 29-221, 29-221 (or 29-223) must be taken in sequence. Students that begin the program at an advanced level because they possess native proficiency must complete the total number of French Studies course requirements by substituting other approved French Studies courses.

Honours Bachelor of Arts in French Studies

Total courses: forty.

Major requirements: twenty-three courses, consisting of:
(a) eight Literature courses: 29-141 and 29-357; plus one of 29-252, 29-253, 29-255, 29-257, 29-350, 29-353, 29-354, one of 29-356, 29-358,–; and one of 29-284, 29-383, 29-385. Plus three more 29- literature courses from the preceding list, of which one must be a (300-level) course;
(b) seven Language Training courses: 29-121, and 29-122, or 29-123 (double credit); 29-221, and 29-222, or 29-223 (double credit); one of 29-215, 29-315 or 29-317; and two of 29-325, 29-328, 29-329;(c) four Linguistics courses: 29-230 and 29-231; and two of 29-330, 29-332, 29-333;(d) two Culture courses: 29-260, 29-270, 29-281, or 29-283;
(e) one (300-level) course from any area, excluding 29-315;
(f) one Special Topics (400-level) course.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Arts or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) one course from any area of study, including French;
(c) eight courses from any area of study, excluding French.

All courses with the prefix 29- are taught entirely in French. Courses are three hours per week (3.00 credit hours) unless otherwise indicated. Not all courses are offered every year. Please contact the French Studies program at the Department of Languages, Literatures and Cultures office or its web site at www.uwindsor.ca/french to learn which courses will be offered in future years for program planning purposes.
An antirequisite specified in the online course description lists a specific course or level of attainment which, if already successfully completed, does not permit registration for credit in the course.

Language training courses 29-114, 29-121, 29-122 (or 29-123); 29-221, 29-221 (or 29-223) must be taken in sequence. Students that begin the program at an advanced level because they possess native proficiency must complete the total number of French Studies course requirements by substituting other approved French Studies courses.

Combined Honours French Studies Programs

Program Regulation:
Students in combined programs must complete the major requirements for both

subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements-French Studies: seventeen courses consisting of:
(a) six Literature courses: 29-141, 29-357 plus one of 29-252, 29-253, 29-255, 29-257, 29-350, 29-353, 29-354,one of 29-356, 29-358; and one of 29-284, 29-383, 29-385. Plus one more 29- (300-level) literature course from the preceding list;
(b) six Language Training courses: 29-121, and 29-122, or 29-123 (double credit); 29-221, and 29-222, or 29-223 (double credit); one of 29-215, 29-315 or 29-317; and one of 29-325, 29-328, 29-329;
(c) three Linguistics courses: 29-230 and 29-231; and one of 29-330, 29-332, 29-333;
(d) one Culture course: 29-260, 29-270, 29-281, or 29-283;
(e) one Special Topics (400-level) course.

Major requirements - Other Subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Arts or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) additional courses from any area of study to a total of forty courses.

All courses with the prefix 29- are taught entirely in French. Courses are three hours per week (3.00 credit hours) unless otherwise indicated. Not all courses are offered every year. Please contact the French Studies program at the Department of Languages, Literatures and Cultures office or its web site at www.uwindsor.ca/french to learn which courses will be offered in future years for program planning purposes.
An antirequisite specified in the online course description lists a specific course or level of attainment, which, if already successfully completed, does not permit registration for credit in the course.

Language training courses 29-114, 29-121, 29-122 (or 29-123); 29-221, 29-221 (or 29-223) must be taken in sequence. Students that begin the program at an advanced level because they possess native proficiency must complete the total number of French Studies course requirements by substituting other approved French Studies courses.

Minor in French Studies

Required: a minimum of six French Studies courses, including 29-121, 29-122, 29-221, and 29-222; plus two courses that may be in Language Training, Translation, Linguistics, Literature or Culture.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS) - French Studies

Major Concentration: 29-121, 29-122, 29-141, 29-215 (or 29-315), 29-221, 29-222, 29-230, 29-231, plus one additional French Literature course, three courses from any area of French studies. At least one course must be in the literature or culture of Francophone Canada.

Minor Concentration: 29-121, 29-122, 29-221, and 29-222; plus two courses that may be in Language Training, Translation, Linguistics, Literature or Culture.

<u>French Studies Course Categories</u>
Requirements for degree programs in French Studies make reference to the following groups of courses:
*Preparatory French:*29-114.
French Language Training: 29-121, 29-122, 29-123, 29-215, 29-221, 29-222, 29-223, 29-315, 29-325.

Translation Courses: 29-328, 29-329.
*Linguistics:*29-230, 29-231, 29-330, 29-332, 29-333.
French Literature: 29-141, 29-252, 29-253, 29-255, 29-257, 29-350, 29-353, 29-354, 29-355, 29-356, 29-357.
Franco-Canadian Literature: 29-284, 29-383, 29-385.
Franco-Canadian Culture: 29-270.
Francophone Culture: 29-281, 29-283
Modern French Culture: 29-260.
Special Topics: 29-400 to 29-496.
Directed Readings: 29-497, 29-498, 29-499.

MODERN LANGUAGES

Honours Modern Languages (with year abroad)

The Honours Modern Languages (with year abroad) program will offer students the possibility of completing an Honours degree in either German, Italian or Spanish. The Modern Languages Area Committee will determine whether transfer credit courses from other universities fulfill program requirements.

Total courses: forty

Major requirements: twenty-three courses, including

(a) seven of the following: 07-120, 07-137, 07-220, 07-237, 07-320, 07-337, and 07-437

(b) six language training courses in one language option area from the following: 15-102, 15-202, 15-300, 15-301, 15-400, 15-401 or 21-102, 21-202, 21-300, 21-301, 21-400, 21-401 or 23-102, 23-202, 23-300, 23-301, 23-400, 23-401 (The level of required courses depends on a placement test. The 300-level language training courses are compulsory for all students)*

(c) one of the following courses: 07-202, 07-203, 07-235, 07-321, 15-248, 21-248, 21-356, 23-248

(d) two of the following civilization courses in the chosen language option area: 15-260 and 15-261 or 21-260 and 21-261 or 23-260 and 23-261;

(e) five pre-approved international courses taught in the target language in either “Literature” and/or “Linguistics” and/or “Culture” and/or “Civilization”, taken at a foreign university during the year abroad (see Notes below);

(f) two “Directed Studies Abroad” Distance Education courses (07-357 and 07-358) taken during the year abroad (see Note {3} below)

* Students beginning the program at an advanced level must adhere to the following sequence of priorities in selecting their courses to replace the standard 6 language training course requirement.
(i) Complete all available courses taught in the target language(s).
(ii) Complete additional courses in the chosen language option area(s).
(iii) Complete additional courses in Modern Languages

All courses must be selected in consultation with the program advisor.

Notes:
{1} Students are required to take courses in distinct areas of concentration while abroad. They will have their choice of taking three pre-approved courses in either “Literature” and/or “Linguistics” and/or “Culture” and/or “Civilization”. The specific courses taken in an area depend upon the availability of courses in the area at the host university and the student’s program concentration. As well, all students will be required to take two advanced language-training courses. These are standard and available at any exchange partner university.

{2} Students in the Honours program that are unable to take the required courses abroad, for any reason, will be permitted to transfer to the General or Honours with SLE programs. The modular design of the Modern Languages curriculum (a common first two years curriculum) permits this transfer to another program without any loss in time or additional costs to the student.

{3} Students also will register for the “Directed Studies Abroad” Distance Education courses. Students on exchange will be required to attend specific cultural events (museums; art galleries, etc.), participate in assigned activities and write reports on their experiences.

Option requirements: six courses including
(a) two Social Sciences courses
(b) two Arts or two Sciences courses
(c) two additional courses from Arts, Social Sciences or Science.

Other requirements:
(a) 01-150, 01-151
(b) three international courses from a foreign university, in any area of study, including Modern Languages
(c) additional courses from any area of study, excluding Modern Languages, to a total of forty courses.

Honours Modern Languages and Second-Language Education*

**NOTE:* Students who successfully complete this degree are eligible for the Certificate in Second Language Education upon application at graduation.

Total courses: forty

Major requirements: twenty courses, including
(a) 07-120, 07-220, 07-137, 07 -237, 07-337; 07-437
(b) 07-320, 07-321, 07-420;
(c) six language training courses in one language option area from the following: 15-102, 15-202, 15-300, 15-301, 15-400, 15-401 or 21-102, 21-202, 21-300, 21-301, 21-400, 21-401 or 23-102, 23-202, 23-300, 23-301, 23-400, 23-401 (The level of required courses depends on a placement test. The 300-level language training courses are compulsory for all students)*
(d) two of the following culture and civilization courses in the chosen language option area: 15-260 and 15-261; or 21-260 and 21-261; or 23-260 and 23-261;
(e) three additional courses from: 07-202, 07-203, 07-235, 15-248, 15-260, 15-261, 21-248, 21-260, 21-261, 21-356, 23-248, 23-260, 23-261

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Arts or Science;
(c) two courses from any area of study, excluding Arts.

*Other requirements:*fourteen courses, including
(a) 01-150, 01-151;
(b) seven more courses from any area of study, including Modern Languages;
(c) five courses from any area of study, excluding Modern Languages;

* Students beginning the program at an advanced level must adhere to the following sequence of priorities in selecting their courses to replace the standard 6 language training course requirement.

(i) Complete all available courses taught in the target language;
(ii) Complete two courses in another language offered by Languages, Literatures and Cultures in which the student has not had prior university-level training including: Arabic, French, German, Italian, Japanese, Ojibwe and Spanish;
(iii) Complete additional courses in the chosen language option area.
(iv) Complete additional courses in Modern Languages
All courses must be selected in consultation with the program advisor.

Combined Honours Modern Languages

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements: sixteen courses, including:
(a) 07-120, 07-220, 07-137, 07-237, 07-320, 07-337, and 07-437

(b) six language training courses in one language option area from the following: 15-102, 15-202, 15-300, 15-301, 15-400, 15-401 or 21-102, 21-202, 21-300, 21-301, 21-400, 21-401 or 23-102, 23-202, 23-300, 23-301, 23-400, 23-401 (The level of required courses depends on a placement test. The 300-level language training courses are compulsory for all students)*

(c) two culture or civilization courses in the chosen language option area: 15-260 and 15-261 or 21-260 and 21-261 or 23-260 and 23-261;
(d) one courses from the following: 07-202, 07-203, 07-235, 07-321, 15-248, 21-248, 21-356, 23-248

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Arts or Science;
(c) two courses from any area of study, excluding Arts.

Major requirements-Other Subject: as prescribed by that area of study.

Other requirements:
(a) 01-150, 01-151;
(b) additional courses from any area of study to a total of forty courses.

* Students beginning the program at an advanced level must adhere to the following sequence of priorities in selecting their courses to replace the standard 6 language training course requirement.
(i) Complete all available courses taught in the target language(s).
(ii) Complete additional courses in the chosen language option area(s).
(iii) Complete additional courses in Modern Languages

All courses must be selected in consultation with the program advisor.

Honours Modern Languages with Two Languages Option

*NOTE: Students who successfully complete this degree are eligible for the Certificate in Second Language Education upon application at graduation.

Total courses: forty

Major requirements: twenty-four courses, including

(a) 07-120, 07-220, 07-137, 07-237, 07-320, 07-337, and 07-437

(b) six language training courses in each of two language option areas from the following: 15-102, 15-202, 15-300, 15-301, 15-400, 15-401 or 21-102, 21-202, 21-300, 21-301, 21-400, 21-401 or 23-102, 23-202, 23-300, 23-301, 23-400, 23-401 (The level of required courses depends on a placement test. The 300-level language training courses are compulsory for all students)*
(c) two of the following culture and civilization courses in each of the two chosen language option areas: 15-260 and 15-261; or 21-260 and 21-261; or 23-260 and 23-261
(d) one of the following courses: 07-202, 07-203, 07-235, 07-321, 15-248, 21-248, 21-356, 23-248

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Arts or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements: ten courses, including
(a) 01-150, 01-151;
(b) four courses from any area of study, including Modern Languages;
(c) four courses from any area of study, excluding Modern Languages

* Students beginning the program at an advanced level must adhere to the following sequence of priorities in selecting their courses to replace the standard 6 language training course requirement.
(i) Complete all available courses taught in the target language(s).
(ii) Complete additional courses in the chosen language option area(s).
(iii) Complete additional courses in Modern Languages

All courses must be selected in consultation with the program advisor

Certificate in Second Language Education

Total courses: eight.
Requirements:
(a) 07-120, 07-220, 07-320, 07-321, 07-420;
(b) one course from any area of Modern Languages, excluding language training courses;
(c) plus any two language training courses in which the student does not have prior university level training (either Arabic, French, German, Italian, Spanish, Japanese or Ojibwe).
Native or heritage speakers of any of these languages must take two courses in a language with which they are not familiar.

NOTE: The Certificate in Second Language Education is not equivalent to nor does it provide the necessary qualification for professional certification by the Ontario College of Teachers.

Minor in Modern Languages (Concentration in Language)

Required Courses:
To complete the requirement for this minor, students normally will take the following language-training courses in one language-option area:
German: 15- 102*, 15-202*, 15-300, 15-301;
Italian: 21-102*, 21-202*, 21-300, 21-301;
Spanish: 23-102*, 23-202*, 23-300 and 23-301.

NOTE: Students with a prior knowledge of the target language must meet with a Modern Languages counsellor before registering for a Minor in that language.
**Double-weighted course.*

Minor in Modern Languages (Concentration in Language and Culture)

Required Courses:
(a) one of the following intensive language-training course*, or equivalent, in one language-option area (German: 15- 102; Italian: 21-102; Spanish: 23-102);
NOTE: Students with a prior knowledge of the target language must meet with a Modern Languages counsellor before registering for a Minor in that language.
(b) 07-137;
(c) two of the following culture and/or civilization courses in the chosen language option area: (German 15-248, 15-260, 15-261; Italian 21-248, 21-260, 21-261; Spanish 23-248, 23-260, 23-261);
(d) one of 07-202 or 07-203.

NOTE: Modern Languages students may take a minor in a language other than their major. If courses in the minor also form part of the major, a substitution of these courses will be permitted with the approval of the Programme Co-ordinator.

**Double-weighted course.*

Minor in Modern Languages (Concentration in Linguistics and Literature)

Required Courses: 6

(a) three linguistics courses as follows: 07-120. 07-220, 07-320
(b) three literature courses as follows: 07-137, 07-237, 07-337

Major and Minor Concentrations - Bachelor of Arts and Science (BAS) - Modern Languages

Major Concentration: 07-120, 07-220, 07-137, 07-237; six language training courses in one language option area (the level of required courses depends on a placement test); two literature, culture or civilization courses in the area of the language option. Students entering the program at an advanced level must complete their language training requirements by selecting from among 300- and 400-level courses taught in the target language.

Minor Concentration: four language training courses in one language option area (the level of required courses depends on a placement test), plus two literature, culture or civilization courses in the area of the language option. Students entering the program at an advanced level must complete their language training requirements by selecting from among 300- and 400-level courses taught in the target language.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS) -

Linguistics and Literature

Minor Concentration: 6 courses
(a) three linguistics courses as follows: 07-120, 07-220, 07-320
(b) three literature courses as follows: 07-137, 07-237, 07-337

Minor in Arabic Studies

The Minor in Arabic Studies is offered in either a language intensive or culture intensive stream.

Required: a minimum of six courses, including 08-110 and 08-111. (Those with prior language proficiency cannot register for these courses and will have to take 08-210 and 08-211 in their place.)

Language stream requirements:
(a) 08-210, 08-211 and any two of the following: 08-261, 08-262, 29-283, 29-358, 45-261, 45-365, 45-373, 53-106.

Culture stream requirements:
(a) any four of the following: 08-261, 08-262, 29-283, 29-358, 45-261, 45-365, 45-373, 53-106.

Minor in Jewish Studies

Required Courses: A minimum of six Jewish Studies courses, including 06-120 and any five of the following; 06-110, 06-111, 06-170, 06-220, 06-230, 06-235, 06-236, 06-270, 06-370.

PROGRAM REGULATIONS

Greek and Roman Studies are devoted to the examination, analysis, and understanding of the languages, literatures, and history of the ancient Near East, Greece and Rome, and to an exploration of their cultural and linguistic legacies to modern society.

The Modern Languages program is devoted to the study and analysis of world languages in the context of their literary and cultural traditions. In addition to providing the opportunity to learn a new language and explore another culture, the Modern Languages Program focuses on Second Language Education, which explores the process through which a second language is learned. Such knowledge enables our students to become more effective language students and language teachers.

French Studies: The French language is an essential part of Canada's culture, not only for those who become teachers or translators, but also for those who enter the legal profession, the federal or provincial civil service, social work, business, or industry - in short, all walks of life.

Options in French Studies: Students wishing to take French as an option are free to select any course provided that they have demonstrated a sufficient command of the language, and/or sufficient preparation in literary studies.

Not all courses listed will be offered in each term. The programs reserve the right to limit enrollment in language courses and to place students in courses deemed appropriate to their level of language competence.

Native speakers must consult a program advisor for placement. All majors should plan their programs in consultation with an advisor.

Language courses numbered 100/101, 200/201, 220/221, and 300/301 must be taken in sequence unless special permission is obtained from a program advisor.

LLC: COURSES

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FACULTY OF SCIENCE

Bachelor of Science (General Science)

Total courses: thirty.

Major requirements: 18 courses

(a) two sets of six courses from two different Departments or School as listed:

- Biological Sciences: 55-140 and 55-141; and *four 55-xxx courses at the 200 level or above
- Chemistry and Biochemistry: 59-140 and 59-141; and *four 59-xxx courses at the 200 level or above
- Computer Science: 60-140 and 60-141; and *four 60-xxx courses at the 200 level or above
- Environmental Science: 66-140 and 66-141; and *four 66-xxx courses at the 200 level or above
- Economics: 41-110 and 41-111; and *four 41-xxx courses at the 200 level or above
- Mathematics and Statistics: 62-140 (or 62-139) and 62-141; and *four 62-xxx or 65-xxx courses at the 200 level or above
- Physics: 64-140 and 64-141; and *four 64-xxx courses at the 200 level or above

*NOTE: These courses must satisfy the *Major Requirements* for a degree program in the Department or School.

(b) one set of two courses from a third Department or School as listed:

- Biological Sciences: 55-140 and 55-141
- Chemistry and Biochemistry: 59-140 and 59-141
- Computer Science: 60-140 and 60-141, or 60-104 and 60-205, or 60-106 and 60-205
- Environmental Science: 66-140 and 66-141
- Economics: 41-110 and 41-111

· Mathematics and Statistics: 62-130 and 65-205 or 62-139, or 62-140 and 62-141 or 65-205
· Physics: 64-140 and 64-141 or 64-130 and 64-131

(c) four Science courses at the 300 level or above which satisfy the *Major requirements* for a degree program of the Department or School in the Faculty of Science that offers the courses.

Other requirements: 12 courses
(a) four courses from Arts/Languages and Social Sciences, with at least one from each, and
(b) eight courses from any area of study excluding 55-100, 55-101, 59-100, 59-191, 59-201, 62-101, 62-102, 62-194, 66-110 and 66-111'

Calculation of Major Average
Consistent with the University of Windsor regulations, the major average is calculated from the grades of all Science courses, excluding the grades obtained in the following courses that cannot be used to fulfill the major requirements in the Department or School offering the course: 41-200, 41-201, 55-100, 55-101, 55-212, 59-100, 59-191, 59-201, 59-232, 59-263, 60-207, 60-209, 60-270, 60-305, 60-307, 66-110, 66-111, 66-210, 66-213, 66-214, 62-101, 62-102, 62-194, 64-114, 64-190, 64-191, 64-202, 64-203 and 66-201.

Note: 60-104 or 60-106 and 60-205 count as a 'science pair' (see requirement Major (b) above) and will be included in the calculation of the major average.

Standing Required for Continuation in the B.Sc. (General Science) Program

1) the minimum requirement for continuation "in good standing" in the General

Science program is a minimum cumulative average of 60% and a minimum average of 60% in the required Science courses of this program.

2) If a student has not met the minimum cumulative and science course average requirements by the end of the Summer or Fall term, the student automatically will be placed on probation.

3) If, at the end of the Winter term, a student has not met the minimum cumulative and science course average requirements, the student's record will be referred to the Academic Standing Committee for a decision.
(a) If one average is at least 60%, but the other is between 55% and 59.9% (or if both averages are between 55% and 59.9%), the student normally will be allowed to continue on probation until the next evaluation period.
By the subsequent evaluation period, both averages must be raised to at least 60% or the student will be required to withdraw.
(b) If both averages are below 55%, the student normally will be required to withdraw.
(c) If only one average is below 55%, the student may be required to withdraw.

4) A student who has been required to withdraw may not register in the Faculty of Science for twelve months and may not apply for re-admission before the subsequent Summer term. The student must apply for re-admission to the Faculty through the Office of the Registrar by the appropriate deadline date for the term desired and must with the application include a statement of rationale and any documentation of academic success attained elsewhere.

Readmission to the Faculty is not automatic and will be dependent upon the Academic Standing Committee's assessment of the applicant's prospects for successful completion of the program.

If readmitted, the student will be placed on probation and must raise the cumulative and science course averages to 60% by the next evaluation period and must satisfy any additional conditions of readmission which may have been imposed. If the student fails to meet such requirements, he or she normally will be required to withdraw.

A student who has been required to withdraw a second time will not be eligible for readmission under any conditions.

Standing Required for Graduation from the B.Sc. (General Science) Program

In order to graduate from the B.Sc. (General Science) program, a student must obtain a minimum cumulative average of 60% in all courses and a minimum average of 60% in all required Faculty of Science courses in this program. Students receiving the B.Sc. (General Science) degree will have the designation, "General Science" respectively indicated on their transcripts.

Bachelor of Science (General Science) Degree Completion Program

This program is for graduates of a College diploma program in Medical Laboratory Technology (Science) and can be completed by Flexible Learning. Students admitted to this program should seek academic counselling in the Faculty of Science Office.

FACULTY OF SCIENCE: PROGRAMS

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HISTORY

PROGRAMS
General History
Bachelor of Arts (BA) Honours History
Combined Honours Programs
Minor in History
Major and Minor Concentrations - Bachelor of Arts and Science

Additional Information: GENERAL UNDERGRADUATE REGULATIONS

General History

Total courses: thirty.

Major requirements: twelve courses, consisting of:
(a) 43-110, 43-111;
(b) 7 more courses at the 100 or 200 Level, up to 2 of which may be 100 Level;
(c) 3 more courses at the 300 Level or higher.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages, Science, or one of each;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a)01-150, 01-151;
(b) four courses from any area of study, including History, but of which only one may be an additional 100-level History course;
(c)six courses from any area of study, excluding History.

Up to four of the following courses may be used to satisfy the Major requirements for any History degree: 02-300, 12-262, 12-263, 12-271, 12-272, 24-130, 24-230, 40-240, 40-241, 95-240. (Please note, instructor's permission may be required.) No more than one of this list may be used to satisfy the requirements for a Minor in History.

BA Honours History

Total courses: forty.

Major requirements: eighteen courses, consisting of:
(a) 43-110, 43-111, and 43-303;
(b) 8 more courses at the 100 or 200 Level, up to 3 of which may be 100 Level, and including at least one of the following: 43-113, 43-114, 43-201, 43-207, 43-210, 43-211, 43-220, 43-321, 43-246, 43-249;
(c) 7 more courses at the 300 Level or higher, at least three of which must be at the 400 Level.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages, Science, or one of each (c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) six courses from any area of study, including History;
(c) eight courses from any area of study, excluding History.

Up to four of the following courses may be used to satisfy the Major requirements for any History degree: 02-300, 12-262, 12-263, 12-271, 12-272, 24-130, 24-230, 40-240, 40-241, 95-240, 01-252. (Please note, instructor's permission may be required.) No more than one of this list may be used to satisfy the requirements for a Minor in History.

Combined Honours Programs

Program Regulation:

Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements-History: sixteen History courses, including:
(a) 43-110, 43-111, and 43-303;
(b) 7 more courses at the 100 or 200 Level, up to 3 of which may be 100 Level, and including at least one of the following: 43-113, 43-114, 43-201, 43-207, 43-210, 43-211, 43-220, 43-321, 43-246, 43-249;
(c) 6 more courses at the 300 Level or higher, at least three of which must be at the 400 Level

Major requirements-Other Subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages, Science, or one of each
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) additional courses from any area of study to a total of forty courses.

Up to four of the following courses may be used to satisfy the Major requirements for any History degree: 02-300, 12-262, 12-263, 12-271, 12-272, 24-130, 24-230, 40-240, 40-241, 95-240, 01-252. (Please note, instructor's permission may be required.) No more than one of this list may be used to satisfy the requirements for a Minor in History. Fourth year courses are restricted to History Majors and other students with at least semester 5 standing and permission of the instructor.

Minor in History

Required: six History courses, only one of which may be at the 100 level, and two of which must be at the 300 level or above Students seeking a second teachable subject area in History are advised that they must take two courses in Canadian History.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 43-110 and 43-111; five 200-level three 300-level and two 400-level courses.

Minor Concentration: one of 43-113, 43-114, or 43-124, two 200-level courses, three 300-level or above courses

HISTORY

PROGRAM REGULATIONS

The major areas of concentration include Canadian, American, British, European, and Women's History. Courses are also offered which are designed to provide insight into current national or international issues. Additional offerings which have relevance to contemporary Canadian society include the History of Crime and Cities in North America. Students taking History as an option may select courses through the 300 level. Permission for 400-level courses is necessary unless these are required in an existing program.

General Information
The study of history provides skills essential to many careers - in teaching, law, business, museums, journalism, or public service. It develops critical thinking, research, and writing skills, using both old and new technologies, in a small department with ready access to professors. History is also fascinating in itself, offering a window on various groups and perspectives that shaped the past, both in Canada and comparatively across the globe. Finally, studying the societies, politics, and ideas of past times sharpens the historical memory we can bring to issues of the present, informing and inspiring an active citizenship.

Course Outside of the Department Which May Be Counted Toward History Requirements

Up to four of the following courses may be used to satisfy the Major requirements for any history degree: 12-262, 12-263, 12-271, 12-272, 24-130, 24-230, 40-240, 40-241, 95-240, 01-252. (Please note, instructor's permission may be required.) No more than one of this list may be used to satisfy the requirements for a Minor in History.

HISTORY: COURSES

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INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING

PROGRAMS
Industrial Engineering - General Program
Industrial Engineering - with Minor in Business Administration

CERTIFICATE
Honours Certificate in Industrial and Management Engineering

Additional Information: Industrial and Manufacturing Systems Engineering Program Regulations and Information
Faculty of Engineering Program Information, Regulations, Co-operative Education
GENERAL UNDERGRADUATE REGULATIONS

Bachelor of Applied Science in Industrial Engineering - General Program

OUTLINE OF STUDIES

Note: All students will follow the sequence of study terms shown in their program of study.

FIRST YEAR - *Common to all Industrial Engineering Programs*

Fall Term	**Lect.**	**Lab.**	**Wt.**
85-111.Engineering Mechanics I	2	2	3
85-133.Engineering and Design	3	3	4.5
62-140.Differential Calculus	3	1	3.5
62-126.Linear Algebra	3	1	3.5
85-118. Engineering and the Profession	2		2.0

Winter Term			
85-120.Engineering Thermofluids	3	0.5/1.5	4
62-141.Integral Calculus	3	1	3.5
64-141.Introduction to Physics II	3	3	4.5
59-110.Topics General Chemistry	3	3	4.5
85-119. Technical Communications	2	2	3

SECOND YEAR

Fall Term

62-215. Vector Calculus	3	1.5	3.75
85-232. Engineering Software Fundamentals	3	1.5	3.75
85-234. Electrical and Computing Fundamentals	3	1.5	3.75
85-250. Engineering and the Environment	2	2	3

91-201. Engineering Management and Globalization	3	3	4
75-100. Introduction to Business			

Winter Term

62-216. Differential Equations	3	1	3.5
85-222. Treatment of Experimental Data	3	1	3.5
85-218. Mechanics of Deformable Bodies	3	1	3.5
85-219. Introduction Engineering Materials	3	0	3
85-220, Numerical Analysis for Engineering	3	2	4
70-151. Financial Accounting I			

***Summer Term* Co-op students only**

85-298.Work Term I

THIRD YEAR

Fall Term

91-317.Systems Analysis and Design	3	2	4
91-312.Operations Research I	3	2	4
85-313.Engineering Economics	3	2	4
91-315.Product and Process Design	3	2	4
91-321.Manufacturing Process Design	3	2	4
Non technical elective			

Winter Term

91-311. Computer Aided Design and Computer Aided Manufacturing	3	2	4
91-302. Health, Safety and Human Factors	3	2	4
91-327. Product Quality and Reliability	3	2	4
91-391 Supply Chain Engineering	3	2	4
71-243 Human Resource Management	3	2	4

***Summer Term* Co-op students only**

85-398.Work Term II

FOURTH YEAR

Fall Term

91-400.Capstone Industrial Design Projects	1	8	5/term
91-413.Production Analysis and Logistics	3	2	4

91-422.Simulation of Industrial Systems	3	2	4
91-428.Facilities Design and Logistics	3	2	4
92-321.Control Theory	3	1	3.5
Non-Technical Elective			

Winter Term

91-400.Capstone Design Project	1	8	5/term
91-412.Operations Research II	3	2	4
85-421.Engineering and Society	3	0	3
91-435. DOE Techniques for Manufacturing	3	2	4
91-431 Flexible Manufacturing Systems	3	2	4

***Summer Term* Co-op students only**

85-498.Work Term III

Technical Electives
All technical electives must be engineering courses at or above the 300 level with a maximum one course in a different engineering program.

87-365. Transportation and Traffic Engineering
87-482. Planning and Construction Management
91-311. CAD/CAM
91-430. Directed Studies
91-431. Flexible Manufacturing Systems

Non-Technical Electives
Non-technical electives must be selected from the Faculty of Engineering's approved list in the Undergraduate Calendar.

Bachelor of Applied Science in Industrial Engineering - Minor in Business Administration Option

Students interested in a Minor in Business Administration are able to begin their specialized studies in the Fall term of the third year. This option includes a series of specialized curriculum that was specially prepared by the Odette School of Business for Industrial and Manufacturing Systems Engineering undergraduate students. This option includes one required non-technical elective. The Minor in Business Administration is administered by the Odette School of Business.

OUTLINE OF STUDIES

Note: All students will follow the sequence of study terms shown in their program of study.

***FIRST YEAR -** Common to all Engineering Programs*

Fall Term	**Lect.**	**Lab.**	**Wt.**
85-111.Engineering Mechanics I	2	2	3
85-133.Engineering and Design	3	3	4.5
62-140.Differential Calculus	3	1	3.5
62-126.Linear Algebra	3	1	3.5

85-118. Engineering and the Profession	2		2.0

Winter Term

85-120.Engineering Thermofluids	3	0.5/1.5	4
62-141.Integral Calculus	3	1	3.5
64-141.Intro. Physics II	3	3	4.5
59-110.Topics General Chemistry	3	3	4.5
85-119. Technical Communications	2	1	2.5

SECOND YEAR

Fall Term

62-215. Vector Calculus	3	1.5	3.75
85-232. Engineering Software Fundamentals	3	1.5	3.75
85-234. Electrical and Computing Fundamentals	3	1.5	3.75
85-250. Engineering and the Environment	2	2	3
91-201. Engineering Management and Globalization	3	3	4
75-100. Introduction to Business	3	1	3.5

Winter Term

62-216. Differential Equations	3	1	3.5
85-222. Treatment of Experimental Data	3	1	3.5
85-218. Mechanics of Deformable Bodies	3	1	3.5
85-219. Introduction Engineering Materials	3	0	3
85-220 Numerical Analysis for Engineering			
70-151. Financial Accounting			

***Summer Term* Co-op students only**

85-298.Work Term I

THIRD YEAR

Fall Term

91-317.Systems Analysis and Design	3	2	4
91-312.Operations Research I	3	2	4
85-313.Engineering Economics	3	1.5	3.75
91-315 Product and Process Design	3	2	4

91-321 Manufacturing Process	3	2	3
70-255 Managerial Accounting			

Winter Term

91-311. Computer Aided Design and Computer Aided Manufacturing	3	1.5	3.75
91-302. Health, Safety and Human Factors	3	2	3
91-327. Product Quality and Reliability	3	2	4
91-391. Supply Chain Engineering	3	2	3
71-243. Human Resource Management	3	0	3
Non-technical elective			

***Summer Term*Co-op students only**

85-398.Work Term II

FOURTH YEAR

Fall Term

91-400. Capstone Design Project	1	8	5/term
91-413. Production Analysis and Logistics	3	2	4
91-422. Simulation of Industrial Systems	3	2	4
91-428.Facilities Design and Logistics	3	2	4
92-321. Control Theory	3	1	3.5
74-231.Principles of Marketing	3	0	3

Winter Term

91-400. Capstone Design Project	1	8	5/term
91-412. Operations Research II	3	2	4
85-421. Engineering and Society	3	0	3
91-435. DOE Techniques for Manufacturing	3	2	4
91-431. Flexible Manufacturing Systems	3	2	4
73-213. Management Information Systems	3	0	3

***Summer Term*Co-op students only**

85-498.Work Term III

Technical Electives
All technical electives must be engineering courses at or above the 300 level with a maximum one course in a different engineering program

87-365. Transportation and Traffic Engineering
87-482. Planning and Construction Management
91-311. CAD/CAM
91-430. Directed Studies
91-431. Flexible Manufacturing Systems

Non-Technical Electives

Non-technical electives must be selected from the Faculty of Engineering's approved list in the Undergraduate Calendar.

Honours Certificate in Industrial and Management Engineering

Admission Requirements:
A candidate for the Honours Certificate in Industrial and Management Engineerings in Industrial Engineering shall hold the degree of (i) Bachelor of Applied Science (B.A.Sc.); (ii) a four-year B.Sc. (or BCS) degree in Computer Science or in Physics, or related Science fields, (iii) Bachelor of Commerce (B.Comm.), or (iv) BHK Honours.

Total courses: Eight (8) courses

Major requirements:
The proposed program consists of eight (8) undergraduate level courses. The distribution of these courses will be as follows:

(a) a maximum of 5 courses from our 4th year (91-4xx) courses and

(b) a maximum of 4 courses from our 3rd year (91-3xx) and
(c) a maximum of 3 pre-requisite 200-level courses, with the approval of the AAU Head and depending on the discipline of your undergraduate degree.

No 100-level courses will be permitted. The present pre-requisite requirements for 4th year courses must be respected. All selected courses should not be from courses, subjects or topics that were part of the applicant's undergraduate studies.

If students from another program (students with degree from the Department of Electrical and Computer Engineering, degree in Computer Science and so forth) are missing pre-requisites courses critical for successful completion of the certificate, they are to choose from appropriate 2nd yr courses. A maximum of 3 courses from the pre-requisite courses will count towards the certificate, although more may be necessary depending on the student's background.

Other requirements: Students from programs that do not have pre-requisite general engineering courses will need to obtain them as described earlier in this application. If the student has taken the equivalent to required pre-requisite courses, this requirement may/will be waived.

To qualify for the certificate, students will be required to successfully complete all 8 courses at the University of Windsor. No transfer credit will be considered for this certificate.

INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING: COURSES

ENGINEERING: GENERAL COURSES (85-)
ENGINEERING: NON-TECHNICAL ELECTIVE COURSES

Fall 2015 Undergraduate Calendar

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MATHEMATICS AND STATISTICS

PROGRAMS

General Mathematics
Honours Mathematics
Honours Mathematics and Statistics
Honours Mathematics and Computer Science
Concurrent Bachelor of Mathematics (Honours) /Bachelor of Education
Other Combined Honours Programs
Minor in Mathematics
Minor in Statistics
Major and Minor Concentrations - Bachelor of Arts and Science

Additional Information: Mathematics and Statistics Program Regulations and Suggested Courses For Specializations
GENERAL UNDERGRADUATE REGULATIONS

General Mathematics

Total courses: thirty.

Major requirements: thirteen courses, including 62-120 or 62-125, 62-140 or 62-139, 62-141, 62-190, 62-215, 62-216, 62-318, 65-250 and 65-251; plus four other courses at the 200 level or above.

Other requirements:
(a)60-140 and 60-141;
(b)four courses from the Faculty of Arts and Social Sciences;
(c)three courses from any area of study, including Mathematics and Statistics;
(d)eight courses from any area of study, excluding Mathematics and Statistics.

Honours Mathematics

Total courses: forty.

Major requirements: twenty-two courses, consisting of 62-120 or 62-125, 62-140 or 62-139, 62-141, 62-190, 62-215, 62-216, 62-220, 62-221, 62-314, 62-315, 62-318, 62-321, 65-250, 65-251; plus eight more courses (62- or 65-) at the 300 level or above.

Other requirements: 60-140 and 60-141; four courses from Faculty of Arts and Social Sciences, and twelve courses from any area of study.

Honours Mathematics and Statistics

Total courses: forty.

Major requirements: twenty-six courses, consisting of 62-120 or 62-125, 62-140 or 62-139, 62-141, 62-190, 62-215, 62-216, 62-220, 62-221, 62-314, 62-315, 62-318, 62-321, 65-250, 65-251, 65-350, 65-351; plus two additional Statistics courses (65-) at the 300-level or above; plus eight more courses (62- or 65-) at the 300 level or above.

Other requirements: 60-140 and 60-141; four courses from Faculty of Arts and Social Sciences, and eight courses from any area of study.

Honours Mathematics and Computer Science

Total courses: forty.

Major requirements-Mathematics and Statistics: sixteen courses, consisting of 62-120 or 62-125, 62-140 or 62-139, 62-141, 62-190, 62-215, 62-216, 62-220, 62-221, 62-314, 62-315, 62-318, 62-321, 65-250, 65-251; plus two courses (62- or 65-) numbered 300 or higher.

Major requirements-Computer Science: thirteen courses, consisting of 60-100, 60-140, 60-141, 60-212, 60-214, 60-231, 60-254, 60-256, 60-265, and 60-315; plus three additional courses (60-) at the 300 level or above.

Additional Major requirements: four further Mathematics, Statistics, or Computer Science courses at the 200 level or above, excluding 60-106, 60-205, 60-207, 60-305 and 65-205.

Other requirements: seven courses from any area of study.

Other Combined Honours Programs

Honours programs combining Mathematics with a second Honours area of study (other than Computer Science) will consist of:

Total courses: forty.

Major requirements-Mathematics and Statistics: sixteen courses, including 62-120 or 62-125, 62-140 or 62-139, 62-141, 62-190, 62-215, 62-216, 62-220, 62-221, 62-314, 62-315, 62-318, 62-321, 65-250, 65-251; plus two additional courses (62- or 65-) at the 300 level or above.

Major requirements-Other Subject: as prescribed by that area of study.

Other requirements:
(a)60-140 and 60-141;
(b)any additional, non-major requirements as determined by the second area of study;
(c)additional courses, if necessary, from any area of study to a total of forty courses.

Minor in Mathematics

A minor in Mathematics can be obtained upon completion of six courses from the following list, with a minimum grade of 5.0 (C-) in each course: 62-120 or 62-125 or 62-126, 62-140 or 62-139, 62-141, 62-190, 62-215, 62-216, 62-220, 62-221, 62-3XX, 62-4XX, 65-205 or 65-250..

Minor in Statistics

A minor in Statistics can be obtained upon completion of six courses from the following list, with a minimum of 60% in each course: (a) 62-120 or 62-125 or 62-126, 62-140 or 62-139, 62-141 and (b) three courses from 65-250, 65-251, 65-3XX, 65-4XX.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 62-120, 62-190, 62-215, 62-216, 62-220, 62-221, 65-250, 65-251; four of 62-314, 62-315, 62-318, 62-321, 62-322, 62-342, 65-376. (Other requirements: 62-140, 62-141.)

Minor Concentration: 62-120, 62-190, 62-215, 62-216, 62-318, 65-250. (Other requirements: 62-140, 62-141.)

PROGRAM REGULATIONS
All programs in Mathematics are subject to the general University and Faculty of Science regulations as outlined in the relevant sections of this calendar. Additionally, Mathematics majors must obtain a 60% or better in each Mathematics or Statistics course which is explicitly required in their program of registration. Students registered in the combined Mathematics and Computer Science Honours program also must obtain at least 60% in all required Computer Science courses.

SUGGESTED COURSES FOR MATHEMATICS SPECIALIZATION'S
Pure Mathematics: 60-231, 62-322, 62-410, 62-411, 62-420, and 62-422.
Statistics: 60-231, 65-340, 65-350, 65-351, and 62-410.
Applied Mathematics: 60-231, 62-360, 62-374, 64-140, 64-141, 64-151, 64-220, 64-250, 64-321, 64-322, 64-350, 64-420, 64-421, 64-450, and 65-376.
Actuarial: 62-392, 62-374, 62-490, 62-492, 65-350, 65-351, 65-376, 65-452, 65-454, 70-151, 70-255, 72-171, 72-271, and 72-474.

MATHEMATICS AND STATISTICS: COURSES

Fall 2015 Undergraduate Calendar

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MECHANICAL, AUTOMOTIVE AND MATERIALS ENGINEERING

PROGRAMS
Bachelor of Applied Science in Mechanical Engineering
Bachelor of Applied Science in Mechanical Engineering with Aerospace Option
Bachelor of Applied Science in Mechanical Engineering with Automotive Option
Bachelor of Applied Science in Mechanical Engineering with Environmental Option
Bachelor of Applied Science in Mechanical Engineering with Materials Option

ARTICULATION AGREEMENTS (WITH ST. MARY'S UNIVERSITY)
Bachelor of Applied Science in Mechanical Engineering for Graduates of St Mary's University Diploma of Engineering
Bachelor of Applied Science in Mechanical Engineering with Automotive Option for Graduates of St Mary's University Diploma of Engineering
Bachelor of Applied Science in Mechanical Engineering with Environmental Option for Graduates of St Mary's University Diploma of Engineering
Bachelor of Applied Science in Mechanical Engineering with Materials Option for Graduates of St Mary's University Diploma of Engineering

Additional Information: Mechanical, Automotive and Materials Engineering Program Information
Faculty of Engineering Program Information, Regulations, Co-operative Education
GENERAL UNDERGRADUATE REGULATIONS

Bachelor of Applied Science in Mechanical Engineering

OUTLINE OF STUDIES
Note: All students will follow the sequence of study terms shown in their program of study.

FIRST YEAR - *Common to all Engineering Programs*

Fall Term

62-126.Linear Algebra

62-140.Differential Calculus

85-111.Engineering Mechanics I

85-133.Engineering and Design

85-118. Engineering and the Profession

Winter Term

59-110.Topics General Chemistry

62-141.Integral Calculus

64-141. Introductory Physics II

85-120.Engineering Thermofluids

85-119. Technical Communcations

SECOND YEAR

Fall Term

62-215. Vector Calculus

85-232. Engineering Software Fundamentals

85-234. Electrical and Computing Fundamentals

92-210. Dynamics

85-250. Engineering and the Environment

91-201. Engineering Management and Globalization

Winter Term

62-216. Differential Equations

85-219. Introduction Engineering Materials

85-222. Treatment of Experimental Data

85-220 Numerical Analysis for Engineering

85-230. Advanced Engineering and Design

85-218. Mechanics of Deformable Bodies

Summer Term

Co-op students only

85-298.Work Term I

THIRD YEAR

Fall Term

85-212.

85-233.

85-313.Engineering Economics

92-311.Stress Analysis

92-323.Machine Dynamics

Non-Technical Elective

Winter Term

Co-op students only

85-398.Work Term II

Summer Term

92-317.Applied Thermodynamics

92-320.Fluid Mechanics II

92-324.Engineering. Measurements

92-328.Heat Transfer

92-421. Machine Design

92-459. Computer Aided Engineering - CAE

FOURTH YEAR

Fall Term

Co-op students only

85-498.Work Term III

Winter Term

92-418. Thermofluid Systems Design

92-400.Capstone Design

92-411.Design for Failure Prevention

Technical Elective

Technical Elective

Technical Elective

Summer Term

92-321. Control Theory

85-421.Engineering and Society

92-400.Capstone Design

Technical Elective

Technical Elective

Technical Elective

TECHNICAL ELECTIVES
1. A minimum of four out of the six technical electives must be numbered 89-3XX, 89-4XX, 92-3XX, 92-4XX, 94-3XX, or 94-4XX.
2. A maximum of two out of the six technical electives may be replaced with unrestricted electives.
These unrestricted electives may be taken from any department or Faculty, but must have a minimum course weight of 3.0.

NON-TECHNICAL ELECTIVES
Non-technical electives must be selected from the approved list in the Undergraduate Calendar.

Bachelor of Applied Science in Mechanical Engineering with Aerospace Option

OUTLINE OF STUDIES
Note: All students will follow the sequence of study terms shown in their program of study.

Fall Term

62-126.Linear Algebra

62-140.Differential Calculus

85-111.Engineering Mechanics I

85-133.Engineering and Design

85-118. Engineering and the Profession

Winter Term

59-110.Topics General Chemistry

62-141.Integral Calculus

64-141. Introductory Physics II

85-120.Engineering Thermofluids

85-119. Technical Communications

SECOND YEAR

Fall Term

62-215. Vector Calculus

85-232. Engineering Software Fundamentals

85-234. Electrical and Computing Fundamentals

92-210. Dynamics

85-250. Engineering and the Environment

91-201. Engineering Management and Globalization

Winter Term

62-216. Differential Equations

85-219. Introduction Engineering Materials

85-222. Treatment of Experimental Data

85-220 Numerical Analysis for Engineering

85-230. Advanced Engineering and Design

85-218. Mechanics of Deformable Bodies

Summer Term

Co-op students only

85-298.Work Term I

THIRD YEAR

Fall Term

85-212. Thermodynamics

85-233. Fluid Mechanics I

92-311.Stress Analysis

85-313.Engineering Economics

92-323 Machine Dynamics

Non-Technical Elective

Winter Term

Co-op students only

85-398.Work Term II

Summer Term

92-317. Applied Thermodynamics

92-320.Fluid Mechanics II

92-459. Computer Aided Engineering - CAE

92-421. Machine Design

92-328.Heat Transfer

94-370. Aerospace Engineering Fundamentals

FOURTH YEAR

Fall Term

Co-op students only

85-498.Work Term III

Winter Term

92-400. Capstone Design (Aerospace)

92-411. Design for Failure Prevention

92-418. Thermofluid Systems Design

94-371. Aerospace Materials and Manufacturing

94-471. Aerodynamics and Performance

Aerospace Technical Elective *

Summer Term

92-400. Capstone Design (Aerospace)

92-324. Engineering. Measurements

92-321. Control Theory

85-421.Engineering and Society

94-470. Aerospace Propulsion

94-472. Flightworthiness

***Aerospace Technical Electives**

Choose one of the following Courses:

89-434 Polymers

91-428 Facilities Design & Logistics

91-327 Product Quality and Reliability

92-315 Vibrations

92-455 Environmental Effects and Control of Noise

92-450 Gas Dynamics

94-461 Design for Manufacturability

Materials Joining and Aerospace Electronics and Systems*
*(*New Course - to be developed in the future)*

Bachelor of Applied Science in Mechanical Engineering with Automotive Option

OUTLINE OF STUDIES
Note: All students will follow the sequence of study terms shown in their program of study.

FIRST YEAR - *Common to all Engineering Programs*

Fall Term

62-126.Linear Algebra

62-140.Differential Calculus

85-111.Engineering Mechanics I

85-133.Engineering and Design

85-118. Engineering and the Profession

Winter Term

59-110.Topics General Chemistry

62-141.Integral Calculus

64-141. Introductory Physics II

85-120.Engineering Thermofluids

85-119. Technical Communications

SECOND YEAR

Fall Term

62-215. Vector Calculus

85-232. Engineering Software Fundamentals

85-234. Electrical and Computing Fundamentals

92-210. Dynamics

85-250. Engineering and the Environment

91-201. Engineering Management and Globalization

Winter Term

62-216. Differential Equations

85-219. Introduction Engineering Materials

85-222. Treatment of Experimental Data

85-220 Numerical Analysis for Engineering

85-230. Advanced Engineering and Design

85-218. Mechanics of Deformable Bodies

Summer Term

Co-op students only

85-298.Work Term I

THIRD YEAR

Fall Term

85-212. Thermodynamics

85-233. Fluid Mechanics I

92-311.Stress Analysis

85-313.Engineering Economics

92-323 Machine Dynamics

Non-Technical Elective

Winter Term

Co-op students only

85-398.Work Term II

Summer Term

92-317.Applied Thermodynamics

92-320.Fluid Mechanics II

92-459. Computer Aided Engineering - CAE

92-421. Machine Design

92-328.Heat Transfer

94-330. Automotive Engineering Fundamentals

FOURTH YEAR

Fall Term

Co-op students only

85-498.Work Term III

Winter Term

92-418. Thermofluid Systems Design

92-400.Capstone Design

92-411.Design for Failure Prevention

94-463. Vehicle Dynamics

94-467. Vehicle Thermal Management

Technical Elective

Summer Term

92-321. Control Theory

92-324.Engineering. Measurements

85-421.Engineering and Society

92-400.Capstone Design

94-465. Internal Combustion Engines

Technical Elective

AUTOMOTIVE TECHNICAL ELECTIVES
Automotive Option Program technical electives must have an automotive focus and be numbered 89-XXX, 92-XXX, or 94-XXX.

NON-TECHNICAL ELECTIVES
Non-technical electives must be selected from the approved list in the Undergraduate Calendar.

Bachelor of Applied Science in Mechanical Engineering with Environmental Option

OUTLINE OF STUDIES

Note: All students will follow the sequence of study terms shown in their program of study.

FIRST YEAR - *Common to all Engineering Programs*

Fall Term

62-126. Linear Algebra

62-140. Differential Calculus

85-111. Engineering Mechanics I

85-133. Engineering and Design

85-118. Engineering and the Profession

Winter Term

59-110. Topics General Chemistry

62-141. Integral Calculus

64-141. Introductory Physics II

85-120. Engineering Thermofluids

85-119. Technical Communications

SECOND YEAR

Fall Term

62-215. Vector Calculus

85-232. Engineering Software Fundamentals

85-234. Electrical and Computing Fundamentals

92-210. Dynamics

85-250. Engineering and the Environment

91-201. Engineering Management and Globalization

Winter Term

62-216. Differential Equations

85-219. Introduction Engineering Materials

85-222. Treatment of Experimental Data

85-220 Numerical Analysis for Engineering

85-230. Advanced Engineering and Design

85-218. Mechanics of Deformable Bodies

Summer Term

Co-op students only

85-298. Work Term I

THIRD YEAR

Fall Term

85-212. Thermodynamics

85-233. Fluid Mechanics I

92-311. Stress Analysis

85-313. Engineering Economics

92-323. Machine Dynamics

Non-Technical Elective

Winter Term

Co-op students only

85-398. Work Term II

Summer Term

92-317. Applied Thermodynamics

92-320. Fluid Mechanics II

92-459. Computer Aided Engineering - CAE

92-421. Machine Design

92-328. Heat Transfer

92-428. Sustainability in Engineering

FOURTH YEAR

Fall Term

Co-op students only

85-498. Work Term III

Winter Term

92-418. Thermofluid Systems Design

92-400. Capstone Design

92-411. Design for Failure Prevention

93-362. Air Pollution Control

93-363. Water and Waster Water Treatment
93-364. Materials Recovery and Waste Management

Summer Term

92-321. Control Theory

92-324. Engineering Measurements

85-421. Engineering and Society

92-400. Capstone Design

92-455. Environmental Effects and Control of Noise

Technical Elective

ENVIRONMENTAL TECHNICAL ELECTIVES
Environmental Option Program technical elective must have an environmental focus and be numbered 87-3XX, 87-4XX, 92-3XX, 92-4XX, 93-3XX, 93-4XX, or 94-4XX.

NON-TECHNICAL ELECTIVES
Non-technical electives must be selected from the approved list in the Undergraduate Calendar.

Bachelor of Applied Science in Mechanical Engineering with Materials Option

OUTLINE OF STUDIES

Note: All students will follow the sequence of study terms shown in their program of study.

FIRST YEAR - *Common to all Engineering Programs*

Fall Term

62-126.Linear Algebra

62-140.Differential Calculus

85-111.Engineering Mechanics I

85-133. Engineering and Design

85-118. Engineering and the Profession

Winter Term

59-110.Topics General Chemistry

62-141.Integral Calculus

64-141. Introductory Physics II

85-120.Engineering Thermofluids

85-119. Technical Communication

SECOND YEAR

Fall Term

62-215. Vector Calculus

85-232. Engineering Software Fundamentals

85-234. Electrical and Computing Fundamentals

92-210. Dynamics

85-250. Engineering and the Environment

91-201. Engineering Management and Globalization

Winter Term

62-216. Differential Equations

85-219. Introduction Engineering Materials

85-222. Treatment of Experimental Data

85-220 Numerical Analysis for Engineering

85-230. Advanced Engineering and Design

85-218. Mechanics of Deformable Bodies

Summer Term

Co-op students only

85-298.Work Term I

THIRD YEAR

Fall Term

85-212. Thermodynamics

85-233. Fluid Mechanics I

92-311.Stress Analysis

85-313.Engineering Economics

92-323 Machine Dynamics

Non-Technical Elective

Winter Term

Co-op students only

85-398.Work Term II

Summer Term

92-317.Applied Thermodynamics

92-320.Fluid Mechanics II

92-459. Computer Aided Engineering - CAE

92-421. Machine Design

92-328. Heat Transfer

89-330. Materials and Properties

FOURTH YEAR

Fall Term

Co-op students only

85-498.Work Term III

Winter Term

92-418. Thermofluid Systems Design

92-400.Capstone Design

92-411.Design for Failure Prevention

89-420. Ceramic Materials

89-421. Deformation and Fracture

89-331. Theromodynamics and Kinetics of Materials

Summer Term

92-321. Control Theory

92-324. Engineering. Measurements

85-421. Engineering and Society

92-400. Capstone Design

Technical Elective

Technical Elective

MATERIALS TECHNICAL ELECTIVES
Materials Option Program technical electives must be numbered 89-XXX.

NON-TECHNICAL ELECTIVES
Non-technical electives must be selected from the approved list in the Undergraduate Calendar.

ARTICULATION AGREEMENTS WITH ST. MARY'S UNIVERSITY (GENERAL OPTION, AUTOMOTIVE OPTION, MATERIALS OPTION and ENVIRONMENTAL OPTION)

The total course requirements and course sequence listed are for students who have met the minimum requirement of C- for each course for which transfer credit has been assessed. Additional courses will need to be taken for students who have not qualified for the maximum allowable transfer credit.

Bachelor of Applied Science in Mechanical Engineering Articulation Agreement with St Mary's University Diploma of Engineering

OUTLINE OF STUDIES

Note: All students will follow the sequence of study terms shown in their program of study.

Total courses: 25

YEAR 1
Fall Term
85-212 Thermodynamics
92-311 Stress Analysis
92-323 Machine Dynamics

91-201 Management and Globalization
Technical Elective

Winter Term
01-151 Effective Writing II
85-219 Engineering Materials Fundamentals
85-230 Advanced Engineering & Design
85-220 Analysis of Engineering Systems
Technical Elective

Summer Term
92-317 Applied Thermodynamics
92-320 Fluid Mechanics II
92-328 Heat Transfer
92-324 Engineering Measurements
92-421 Machine Design
92-459 Computer Aided Engineering

Students must have completed all of the 1st year and 2nd year courses and at least ten of the twelve 3rd year courses before being allowed to register into the 4th year courses, including all prerequisite courses required for registration into the 4th year courses.

YEAR 2

Winter Term
92-400 Capstone Design Project
92-418 Thermofluid Systems Design
92-411 Design for Failure Prevention
Technical Elective

Summer Term
92-400 Capstone Design Project
92-321 Control Theory
85-421 Engineering & Society
Technical Elective
Technical Elective

TECHNICAL ELECTIVE RESTRICTIONS
A minimum of four out of the six technical electives must be numbered 89-3XX, 89-4XX, 92-3XX, 92-4XX, 94-3XX, or 94-4XX. Current technical electives for the General Program are listed in Undergraduate Handbook.
A **maximum of two** out of the six technical electives may be replaced with unrestricted electives. These unrestricted electives may be taken from any department or Faculty, but must have a minimum course weight of 3.0.

Bachelor of Applied Science in Mechanical Engineering with Automotive Option Articulation Agreement with St Mary's University Diploma of Engineering

OUTLINE OF STUDIES

Note: All students will follow the sequence of study terms shown in their program of study.

Total courses: 26

YEAR 1

Fall Term
85-212 Thermodynamics
92-311 Stress Analysis
92-323 Machine Dynamics
91-201 Management and Globalization

Winter Term
85-119. Technical Communications
85-219 Engineering Materials Fundamentals
85-230 Advanced Engineering & Design
85-220 Analysis of Engineering Systems

Summer Term
92-317 Applied Thermodynamics
92-320 Fluid Mechanics II
92-328 Heat Transfer
92-421 Machine Design
92-459 Computer Aided Engineering
94-330 Automotive Eng. Fundamentals

Students must have completed all of the 1st year and 2nd year courses and at least ten of the twelve 3rd year courses before being allowed to register into the 4th year courses, including all prerequisite courses required for registration into the 4th year courses.

YEAR 2

Winter Term
92-400 Capstone Design Project
92-418 Thermofluid Systems Design
92-418 Design for Failure Prevention
94-463 Vehicle Dynamics
94-467 Vehicle Thermal Management
Technical Elective

Summer Term
92-400 Capstone Design Project
92-321 Control Theory
92-324 Engineering Measurements
85-421 Engineering & Society
94-461 Internal Combustion Engines
Technical Elective

TECHNICAL ELECTIVE RESTRICTIONS
Technical Electives for the Automotive Option Program must have an automotive focus and be numbered 89-XXX, 92-3XX, 92-4XX, or 94-XXX. Current technical electives for the Automotive Option Program are listed in the Undergraduate Handbook.

Bachelor of Applied Science in Mechanical Engineering with Environmental Option Artciulation Agreement with St Mary's University Diploma of Engineering

OUTLINE OF STUDIES

Note: All students will follow the sequence of study terms shown in their program of study.

Total courses: 26

YEAR 1

Fall Term
85-212 Thermodynamics
92-311 Stress Analysis
92-323 Machine Dynamics
91-201 Management and Globalization

Winter Term
85-119. Technical Communications
85-219 Engineering Materials Fundamentals
85-230 Advanced Engineering & Design
85-220 Analysis of Engineering Systems

Summer Term
92-317 Applied Thermodynamics
92-320 Fluid Mechanics II
92-328 Heat Transfer
92-428 Sustainability in Engineering
92-421 Machine Design
92-459 Computer Aided Engineering

Students must have completed all of the 1st year and 2nd year courses and

at least ten of the twelve 3rd year courses before being allowed to register into the 4th year courses, including all prerequisite courses required for registration into the 4th year courses.

YEAR 2

Winter Term
92-400. Capstone Design Project
92-418. Thermofluid Systems Design
92-411 Design for Failure Prevention
93-362 Air Pollution Control
93-363 Water & Wastewater Treatment
93-364 Materials Recovery and Waste Management

Summer Term
92-400 Capstone Design Project
92-321 Control Theory
85-421 Engineering & Society
92-324 Engineering Measurements
92-455 Envir. Effects & Control of Noise
Technical Elective

TECHNICAL ELECTIVE RESTRICTIONS
Technical Electives for the Environmental Option Program must have an environmental focus and be numbered 87-4XX, 92-4XX, 93-4XX, or 94-4XX. Current technical electives for the Environmental Option Program are listed in the Undergraduate Handbook.

Bachelor of Applied Science in Mechanical Engineering with Materials Option Articulation Agreement with St Mary's University Diploma of Engineering

OUTLINE OF STUDIES

Note: All students will follow the sequence of study terms shown in their program of study.

Total courses: 26

YEAR 1

Fall Term
85-212 Thermodynamics
92-311 Stress Analysis
92-323 Machine Dynamics
91-201 Management and Globalization

Winter Term
85-119. Technical Communications
85-219 Engineering Materials Fundamentals
85-230 Advanced Engineering & Design
85-220 Analysis of Engineering Systems
Technical Elective

Summer Term
92-317 Applied Thermodynamics
92-320 Fluid Mechanics II
92-328 Heat Transfer
89-330 Materials and Their Properties
92-421 Machine Design
92-459 Computer Aided Engineering

Students must have completed all of the 1st year and 2nd year courses and at least ten of the twelve 3rd year courses before being allowed to register into the 4th year courses, including all prerequisite courses required for registration into the 4th year courses.

YEAR 2

Winter Term
92-400 Capstone Design Project

92-418 Thermofluid Systems Design
92-411 Design for Failure Prevention
89-331 Thermodynamics & Kinetics of Materials
89-420 Ceramic Materials
89-421 Deformation and Fracture

Summer Term
92-400 Capstone Design Project
92-321 Control Theory
85-421 Engineering & Society
92-324 Engineering Measurements
Technical Elective

TECHNICAL ELECTIVE RESTRICTIONS
Technical Electives for the Materials Option Program must be numbered 89-XXX. Current technical electives for the Materials Option Program are listed in the Undergraduate Handbook.

MECHANICAL, AUTOMOTIVE AND MATERIALS ENGINEERING: COURSES
ENGINEERING: GENERAL COURSES (85)
ENGINEERING: NON-TECHNICAL ELECTIVE COURSES

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SCHOOL OF CREATIVE ARTS

PROGRAMS IN MUSIC
Honours Bachelor of Arts in Music
Honours Bachelor of Music (Music Education and Comprehensive streams)
Combined BA Honours Degree Program - Music
Honours Bachelor of Music Therapy *(Note: As of Fall 2012, there are no new admission to the program.)*
Minor in Music
Major and Minor Concentrations - Bachelor of Arts and Science

Additional Information: Music Performance Regulations
GENERAL UNDERGRADUATE REGULATIONS

PROGRAMS IN VISUAL ARTS
General BA in Visual Arts *(Note: As of Fall 2013 there are no direct admissions from High School. Students will be applying directly to the Honours program.)*
BA Honours in Visual Arts and Communication, Media, and Film
BA Honours in Media Art Histories and Visual Culture
Combined BA Honours Degree Program - Visual Arts
Bachelor of Fine Arts in Visual Arts
Bachelor of Fine Arts in Visual Arts and the Built Environment
Major and Minor Concentrations - Bachelor of Arts and Science
Minor in Art History/Visual Culture
Certificate in Arts Management *(Program Administered by the Office of the Dean of FASS)*

Additional Information: Visual Arts General Information, Program Regulations, and Areas of Study
GENERAL UNDERGRADUATE REGULATIONS

PROGRAMS IN MUSIC

Honours Bachelor of Arts in Music

ADMISSION REQUIREMENTS
No audition is required to enrol in this degree; however it is necessary to pass the entrance examinations for 32-112 and 32-222; and to audition for most ensemble courses for students who elect to enrol in them.

Total courses: forty

Major requirements: twenty courses, consisting of 32-112, 32-113, 32-212, 32-213, 32-126, 32-127; the 1.50 courses 32-222, 32-223; two courses in *Performance Studies* or *Ensemble*; eleven additional Music courses, including six at the 200-level or above from *History and Literature (Musicology)* and/or *Theory and Composition*.

Option requirements:
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) four courses from any area of study, including Music.
(c) eight courses from any area of study, excluding Music (01-110 is strongly recommended).

Honours Bachelor of Music

ADMISSION REQUIREMENTS

In addition to meeting the regular requirements for admission to the University, admission to Bachelor of Music programs is conditional upon a successful audition evaluated by faculty members in Music. The audition will consist of:
(a) a theory evaluation test designed to show the nature and extent of the student's aptitude in music theory;
(b) a performance of at least ten minutes' length on the student's major instrument,

showing a grasp of a variety of styles.

Candidates should contact a program advisor in Music for specific requirements in the various performance media. If an accompanist from Music is required, four weeks' prior notice must be given to the Music office, and an accompanist's fee will be charged. Candidates auditioning in Voice or Orchestral Instruments must perform at least one selection with accompaniment. Candidates should apply for an audition on-line at www.uwindsor.ca/music/audition-requirements.

OTHER REGULATIONS

1) Music courses whose middle digit is 0 may not count toward the B.Mus. degree.
2) Ensembles Restriction: Students may take a maximum of 1.50 credit courses of their additional Music courses in Ensembles.

Honours Bachelor of Music (Music Education Stream)

PROGRAM REQUIREMENTS

Total courses: forty.

Major requirements: thirty-two courses, as given below:

History and Literature (Musicology/Ethnomusicology): three courses, consisting of 32-126, 32-127 and 32-346.

Theory and Composition: six courses, consisting of 32-112, 32-113, 32-212, 32-213; and the 1.50 credit hour courses 32-222, 32-223, 32-322, and 32-323.

Performance Studies: six courses, consisting of one course from the series 33-347 to 33-369, or 33-371 (taken six times). (Four corresponding 1.50 credit hour courses from the series 33-317 to 33-339, or 33-341 may be substituted for two 3.0 credit hour courses.

Ensembles: four courses, consisting of eight 1.50 credit hour courses (one in each of eight terms) of 33-210, 33-220, or 33-310.

Methods and Pedagogy: seven courses, consisting of 32-232, 32-239, 32-248, 32-269, 32-279, 33-111, and the 1.50 courses 32-255 and 33-213.

Music Education: four courses, consisting of 32-285, 32-484, 32-485 and 32-494.

Additional Major requirements: two additional courses in History and Literature (Musicology) or Theory and Composition, or one course in the above areas plus two 1.50 courses in Ensembles.

Other requirements:
a) 01-150, 01-151;
b) six courses from any area of study, excluding Music and Music Therapy.

Honours Bachelor of Music (Comprehensive Stream)

PROGRAM REQUIREMENTS

Total courses: forty.

Major requirements: thirty courses, as given below:

History and Literature (Musicology/Ethnomusicology): four courses, consisting of 32-126, 32-127; and 2 additional History and Literature courses.

Theory and Composition: six courses, consisting of 32-112, 32-113, 32-212, 32-213; and the 1.50 credit hour

Performance Studies: six courses, consisting of one course from the series 33-347 to 33-369, or 33-371 (taken six times). (Four corresponding 1.50 credit hour courses from the series 33-317 to 33-339, or 33-341 may be substituted for two 3.0 credit hour courses.

Ensembles: four courses, consisting of eight 1.50 credit hour courses (one in each of eight terms) of 33-210, 33-220, or 33-310. (With the consent of the Director of the School students enrolled in 33-371 or 33-341 may substitute 33-240.)

Music Education: one course, 32-285.

Additional Major requirements: three additional courses in History and Literature (Musicology), or Theory and Composition plus 6 additional Music courses.

Other requirements
a) 01-150, 01-151;
b) six courses from any area of study, excluding Music and Music Therapy.
c) two courses from any area of study, including Music.

In addition to a common core of Music courses, B Mus. (Comprehensive) students may pursue one of a number of different concentrations including Performance, Musicology/Ethnomusicology, Theory and Composition (including Technology). Other concentrations may be pursued, within the limit of faculty resources. Recommended Programs of Study with Suggested Course Sequences for these concentrations are available through Music.

Combined BA Honours Degree Programs - Music

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty

Permission from both Music and the second area of study is required to enroll in this degree program. No audition is required for the degree; however, it is necessary to audition for the required ensemble courses and to pass the examinations for 32-112 and 32-222.

*Major requirements-Music:*seventeen courses consisting of 32-112, 32-113, 32-126, 32-127, 32-212, 32-213; plus two 1.50 credit hour courses, 32-222 and 32-223; a minimum of four semesters of ensemble courses up to a maximum of eight 1.5 credit courses; plus additional Music courses to a total of seventeen.

Music courses whose middle digit is 0 may not count towards this degree.

Major requirements-Other Subject: as prescribed by that area of study.

Honours Bachelor of Music Therapy
(Note: As of Fall 2012, there are no new admission to the program.)

ADMISSION REQUIREMENTS

In addition to meeting the regular requirements for admission to the University, admission to the B.Mus.Th. is conditional upon a successful audition evaluated by faculty members in Music. The audition will consist of:
(a)a theory evaluation test designed to show the nature and extent of the student's aptitude in music theory;
(b)a performance of at least ten minutes' length on the student's major instrument, showing a grasp of a variety of styles;
(c)a personal interview to assess the student's background in working with exceptional people and his or her suitability to pursue a career in music therapy.

Candidates should contact a program advisor in Music for specific requirements in the various performance media. If an accompanist from Music is required, two weeks' prior notice must be given to the Music office, and an accompanist's fee will be charged. Candidates auditioning in Voice or Orchestral Instruments must perform at least one selection with accompaniment.

For further information about auditions, please click here.

OTHER REGULATIONS

Music courses whose middle digit is 0 may not count toward the B.Mus.Th. degree.

PROGRAM REQUIREMENTS

Total courses: forty.

Major requirements: twenty-seven courses as given below:

*History and Literature (Musicology):*two courses, 32-126 and 32-127.

Theory and Composition: six courses, consisting of 32-112, 32-113, 32-212, and 32-213; plus the 1.50 credit hour courses 32-222, 32-223, 32-322 and 32-323.

Performance Studies: six courses, including one course from the private instruction series 33-347 to 33-369 taken four times; plus one 1.50 credit hour course from the private instruction series 33-317 to 33-339 taken four times.

Ensembles: two courses, consisting of four 1.50 credit hour courses in each of four terms from 33-210, 33-220, 33-230, 33-240, 33-250, 33-260, and 33-310.

Music Therapy: seven and one half courses, consisting of 32-120, 32-121, 32-330, 32-331, and 32-420; plus five 1.50 credit hour courses, 32-340, 32-341, 32-440, 32-441, and 32-490.

Other Music courses: three and one half courses, consisting of 32-248 and 33-111; one additional Music course; and the 1.5 credit hour course 33-213. Students whose major instrument is Voice will substitute the equivalent of 1.5 credit hours in any other Music courses (32- or 33-) for 33-213.

Other requirements:
(a) 01-150, 01-151:
(b) three courses in Psychology, consisting of 46-115, 46-116, 46-333;
(c) seven additional courses from the following areas of study: Drama, Kinesiology, Nursing, Psychology, Sociology, Social Work, or Women's Studies, or the course 32-211 American Sign Language and the Disabilities Arts Movement;
(d) Biology 55-204 or 55-202 or Kinesiology 95-265.

CERTIFICATION

Graduates of this program are eligible to apply for certification as a Music Therapist Accredited (MTA) with the Canadian Association of Music Therapy.

Other requirements:
(a) 01-150, 01-151;
(b) additional options (if required) to a total of forty.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS) - Music

Minor Concentration: 32-112, 32-113, 32-126, 32-127, plus two additional Music courses (for a total of six credits)

Major Concentration: 32-112, 32-113, 32-116, 32-126, 32-127, 32-346, six courses at the 200-level or above, including two 32-series courses, two 33-series courses, and two Music *History and Literature (Musicology)* courses.

Minor in Music

Six courses, including 2 courses in the area of Music *History and Literature (Musicology)*; 2 courses in the area of Music *Theory and Composition*; plus two other music courses with the exception of private instruction courses. (300 level series)
*consult course descriptions for information regarding prerequisites.

MUSIC: COURSES

PROGRAMS IN VISUAL ARTS

General BA in Visual Arts
(Note: As of Fall 2013 there are no direct admissions from High School. Students will be applying directly to the Honours program.)

Total courses: thirty.

Major requirements: sixteen courses, including 27-105, 27-106, 27-107 and 27-108, and eight other studio courses numbered 27-203 through 27-390 plus 28-150, 28-214, 28-215 and either 28-245 or 28-345.

Option requirements: six courses including
(a)two courses from Social Sciences;
(b)two courses from Languages or Science;
(c)two courses from any area of study, excluding Arts.

Other requirements:
(a)01-150, 01-151:
(b)07-202, 07-203;
(c)four more courses from any area of study, excluding Visual Arts.

BA Honours in Visual Arts and Communication, Media, and Film
Total courses: forty.

Major Requirements - Visual Arts: seventeen courses, consisting of 27-105, 27-106, 27-107, plus ten other studio courses numbered 27-203 through 27-390 (at least four courses must be at the 300 level), plus 28-150, 28-214, and 28-215.

Major Requirements - Communication, Media, and Film: sixteen courses including 40-101, 40-234, 40-275, plus one of 40-201, 40-225, 40-334 or 40-375, plus twelve additional courses, at least three of which must be at the 300 or 400 level, and at least two of those must be at the 400 level. (40-398, 40-399, 40-498 and 40-499 do not count as fulfilling the 300 and 400 level requirements; only one of 40-489 or 40-495 may be used to satisfy the 400 level requirement.

Other requirements:
(a) 01-150, 01-151;
(b) two courses from Languages or Science;
(c) three courses from any area of study, excluding Visual Arts and Communication, Media and Film.

NOTE: With the permission of the Department Head, up to two courses not offered or not cross-listed by the Department of Communication, Media, and Film may be used to satisfy the Major requirement for Honours Communication, Media, and Film degrees, provided a significant portion of the course content covers topics from communication, media, or film.

BA Honours in Media Art Histories and Visual Culture

Total courses: forty.

Major Requirements-Visual Arts Studio: fourteen courses, consisting of 27-105, 27-106, 27-107 and 27-108, plus eight other studio courses numbered 27-203 through 27-390 (at least two courses must be at the 300 level).

Major Requirements-Media Art Histories/Visual Culture: sixteen courses, including 28-150, 28-214 and 28-215, 28- 355, or 28-3xx, *(History and Theory of Intermedia - New Course to be Developed)* plus twelve other Art History courses numbered 28-245 through 28-456, 2 of which must be at the 400-level. Two of the following courses may be taken to fulfill the Art History course requirement if 28-numbered courses are unavailable; must be approved by an Art History advisor: 11-330, 23-260, 23-261, 40-240, 40-241, 48-413, 48-354.

Other requirements:
(a) 01-150, 01-151:
(b) two courses in a foreign language plus two courses in one of the following areas: Philosophy, English, Intercultural Studies, or Greek and Roman Studies.
(c) 07-202, 07-203 (Culture & Ideas) plus two courses in History (numbered 43-XXX).
(d) Two courses in Science or Social Science

Combined BA Honours Degree Programs - Visual Arts

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses.

Example: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements-Visual Arts:
seventeen courses consisting of Studio Fundamentals 27-105, 27-106, 27-107 and 27-108, plus nine other studio courses numbered 27-203 through 27-390 and/or Cinema Arts courses numbered 39-200 through 39-490. At least four courses must be at the 300-level plus the following Media Art Histories/Visual Culture courses: 28-150, 28-214, 28-215, and either 28-245 or 28-345.

Major requirements-Other Subject as prescribed by that area of study.

Option requirements: six courses including
(a)two courses from Social Sciences;
(b)two courses from Languages or Science;
(c)two courses from any area of study, including Arts.

Other requirements:
(a) 01-150, 01-151:
(b) additional courses from any area of study to a total of forty courses.

Bachelor of Fine Arts in Visual Arts

Total courses: forty.

Major requirements: Studio: twenty courses (66 course credits) as follows: 27-105, 27-106, 27-107, 27-108; one of 27-383 or 27-384; 27-480 (6.0 credits), 27-481 (6.0 credits), 27-490 and 27-491; plus at least three 200-level courses in three other separate areas; five additional 300-level courses in at least three separate areas; and three additional studio courses at the 200 or 300 level (courses beginning either with a 27- or a 39-). Media Art Histories/Visual Culture: eight courses (24 course credits) as follows: 28-150, 28-214, 28-215 and 28-345 (28-345 must be taken before entry into year four), plus four more media art histories/visual culture courses, one of which has to be at the 400-level. (Up to three of the following courses may be taken to fulfill the Art History course requirement if approved by an Art History advisor: 11-330, 23-260, 23-261, 40-240, 40-241, 48-413, 48-354). Students must have a positive Portfolio Evaluation to proceed to their second year of study.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, including Visual Arts.

Other requirements:
(a) 01-150, 01-151:
(b) two courses from any area of study, including Visual Arts.

Portfolio Evaluation: A successful portfolio evaluation is required. The portfolio evaluation takes place at the end of semester 2, after the student has gained credit in 27-105, 27-106, 27-107, 27-108, 28-150.

Students who are otherwise in good standing, but whose portfolio evaluation is not successful may:
(a) be allowed to continue in the B.F.A. program on a conditional basis, subject to re-evaluation;
(b) be allowed to transfer to the general Bachelor of Arts-Visual Arts program.

Consult a program advisor in Visual Arts for details regarding portfolio requirements and procedures.

VISUAL ARTS - ADDITIONAL PROGRAM INFORMATION

Visual Arts General Information
Transfer Students: Students who have taken art courses at other post-secondary institutions and desire credit for basic courses in Visual Arts may be required to submit a portfolio of their own work for evaluation by Visual Arts, together with an official transcript of their record and catalogues describing the courses taken, all of which must be submitted no later than two weeks before the first day of classes.

Visual Arts Program Requirements
1) 28-150 must be taken in the first year.
2) Visual Arts students must take 27-105, 27-106, 27-107, and 27-108 in the first year.

3) Registration in any studio courses numbered in the 27-200's requires a successful B.F.A. portfolio evaluation.
4) Fourth-year B.F.A. students will be required to participate in the B.F.A. Candidates' Exhibit. The selection of work to be exhibited is to be made with the approval of the student's instructor in Studio Practice II.

Visual Arts and the Built Environment
Note: Students admitted to the BFA in Visual Arts and the Built Environment (VABE) program are also required to apply for a US study visa in consultation with the University of Detroit Mercy (UDM), in order to attend and complete courses at the UDM School of Architecture. Admission to the VABE program does not guarantee the granting of a study visa by the US government. Continuation in the VABE program requires that a study visa is granted by the US government.

Areas of Study
Requirements for degree programs in Visual Arts make reference to the following groups of courses:
Basic Courses: 27-105, 27-106, 27-107, 27-108, and Media Art Histories/Visual Culture 28-150, 28-214 and 28-215.
Drawing/Printmaking: 27-203, 27-223, 27-303, 27-326, 27-365, 27-390.
Inter-media Practices: 27-383, 27-384, 27, 371, 27-385, 27-386, 27-365, 27-390
Internship: 27-380
Painting: 27-213, 27-313, 27-365, 27-390.
Photography: 27-253, 27-290, 27-346, 27-347, 27-348, 27-365, 27-390
Sculpture/Built Environment: 27-233, 27-255, 27-271, 27-333, 27-371, 27-385, 36-213, 27-365, 27-390.
Time-Based: 27-243, 27-245, 27-263, 27-343, 27-345, 27-363, 39-200, 39-310, 39-320, 39-330, 39-400, 39-420, 39-410, 39-490, 27-365, 27-390

Bachelor of Fine Arts in Visual Arts and the Built Environment (VABE)

In accordance with US government regulations, the VABE program is open only to Canadian citizens legally permitted to commute to the United States. International Visa students interested in the architecture program at the University of Detroit Mercy must apply directly to that institution.

Note: Students admitted to the BFA in Visual Arts and the Built Environment (VABE) program are also required to apply for a US study visa in consultation with the University of Detroit Mercy (UDM), in order to attend and complete courses at the UDM School of Architecture. Admission to the VABE program does not guarantee the granting of a study visa by the US government. Continuation in the VABE program requires that a study visa is granted by the US government.

Students enrolled in the program may be eligible to apply to the fourth year of the architecture program at the Universityof Detroit Mercy (UDM), following completion of their third year in the VABE program. Students admitted to the fourth year of the UDM program would graduate with a General BA in Visual Arts from the University of Windsor. Students who continue to the fourth year of the Windsor program would graduate with a BFA in Visual Arts and the Built Environment. Students who successfully complete the fourth year of the UDM architecture program can graduate with a B.Sc. in Architecture or be eligible for admission to UDM's professional program in Architecture (M.Arch.).

Total courses: forty-four

Major requirements:

School of Creative Arts
(a) 27-105, 27-107, 27-108, 36-110 (6.0 credit course), 36-120 (6.0 credit course); one of 27-383 or 27-384;
(b) 27-480 (6.0 credit course), 27-481 (6.0 credit course), and 27-491
(c) 36-213, 27-385
(d) two additional 300-level studio courses in the same subject area
(e) plus 28-150, 28-214, 28-215, 28-391, 28-456
(f) two other Art History courses, one of which has to be at the 400-level
(g) a successful VABE portfolio evaluation.*

School of Architecture
(a) Professions: 36-119/ARCH1190, 36-129/ARCH1290 (each 1.5 credit courses)
(b) 4 Design Studio courses: 36-230/ARCH1300, 36-240/ARCH1400, 36-310/ARCH2100, 36-320/ARCH2200;
(c) Computer Graphics/Design: 36-116/ARCH1160, 36-216/ARCH2160,
(d) Structures: 36-233/ARCH2330, 36-243/ARCH2430

(e) Co-op Training Prep: 36-300/CEC-300 or 27-380 Visual Arts Internship

Option Requirements:
Five courses including
(a) two Social Science courses
(b) one Science course
(c) two additional courses from Arts excluding Visual Arts

Other Requirements:
(a) 01-150 and 01-151; 24-210, 34-110, and 62-101 or 62-139

***Portfolio Evaluation:** A successful portfolio evaluation is required. The portfolio evaluation takes place at the beginning of semester six, after the student has gained credit in 27-105, 27-107, 27-108, 28-150, 36-110, 36-120, 36-230/ARCH1300, 36-240/ARCH1400, 36-310/ARCH2100, and is enrolled in 36-320/ARCH2200.

Those students seeking to pursue a BSc in Architecture from the UDM after their third year are encouraged to consult a VABE Advisor on what options are transferable. Students who opt to graduate after year 3 and enter the UDM BSc program will receive a BA in Visual Arts. For these students, the VA studio course requirements in the BA will be replaced by the architecture studio courses taken at UDM. Acceptable substitutes for BA requirements 07-202 and 07-203 will include any two Social Sciences courses taken under the option requirements for the VABE program.

Program Sequencing

YEAR 1

Fall
University of Windsor
28-150
36-110
27-107
62-101 or 62-139

University of Detroit Mercy (taken at UDM campus)
36-119/ARCH1190

Winter
University of Windsor
24-210
27-105
36-120
36-213

University of Detroit Mercy (taken at UDM campus)
36-129/ARCH1290

YEAR 2

Fall
University of Windsor
27-108
01-150
28-214

University of Detroit Mercy (taken at UDM campus)
36-216/ARCH2160
36-230/ARCH1300
36-233/ARCH2330

Winter
University of Windsor
01-151
28-215
28-391

University of Detroit Mercy (taken at UDM campus)
36-116/ARCH1160
36-240/ARCH1400
36-243/ARCH2430

YEAR 3

Fall
University of Windsor
27-385
28-456
34-110

1 Social Science Elective

University of Detroit Mercy (taken at UDM campus)
36-310/ARCH2100
36-300/CEC-300* Co-op Training Prep. or 27-380 Visual Arts Internship.

*NOTE: * 36-300 is only needed if a student is planning to enter the UDM B.Sc. Architectural Program after their 3rd year. Students who do not complete the co-op preparation course will need to substitute this requirement with 27-380 Visual Arts Internship.*

Winter
University of Windsor
2 Arts Electives, excluding Visual Arts courses
1 Social Sciences Electives
1 Science Elective

University of Detroit Mercy (taken at UDM campus)
36-320/ARCH2200

YEAR 4

Fall
University of Windsor
27-3xx Studio course
27-480
27-491
28-xxx Art History course

Winter
University of Windsor
27-3xx Studio course
27-383 or 27-384
27-481
28-4xx

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 27-105, 27-106, 27-107 and 27-108, 28-150; seven additional Visual Arts courses at the 200 level or above including three 300-level or above courses.

Minor Concentrations: 27-105, 27-106, 27-107, 27-108 and 28-150; one additional Visual arts course at the 200 level.

Minor in Art History/Visual Culture

Requirements: six Visual Arts courses, including one of 27-105, 27-106, 27-107, 27-108 or 27-110; plus 28-150, 28-214, 28-215 and two additional art history courses.

VISUAL ARTS: COURSES
VISUAL ARTS AND THE BUILT ENVIRONMENT: COURSES

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PHILOSOPHY

PROGRAMS
General Philosophy
Honours Philosophy
Combined Honours Programs
Minor in Philosophy
Major and Minor Concentrations - Bachelor of Arts and Science - Philosophy

Additional Information: Philosophy Program Regulations
GENERAL UNDERGRADUATE REGULATIONS

General Philosophy

Total courses: thirty.

Major requirements: twelve Philosophy courses, at least 9 of which must be at the 200-level or above, including:
(a) 34-110;
(b) 34-221, and one additional Philosophy course with ‘2’ as the middle digit;
(c) 34-273;
(d) 34-276;
(e) one of 34-470, 34-471, 34-472, 34-473, 34-376, 34-377;
(f) one Philosophy course with ‘5’ as the middle digit;
(g) one 200-level or above Philosophy course with ‘6’ as the middle digit;
(h) four additional Philosophy courses, at least one of which is above the 200-level.

Option requirements: six courses including
(a) two courses frm Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) four courses from any area of study, including Philosophy;
(c) six other courses from any area of study, excluding Philosophy.

Honours Philosophy

Total courses: forty.

Major requirements: twenty Philosophy courses, at least 18 of which must be at the 200-level or above, including:
(a) 34-110
(b) 34-221, and one additional Philosophy course with ‘2’ as the middle digit;
(c) one of 34-250 or 34-254;
(d) 34-273 and 34-276;
(e) 34-353, or 34-356;
(f) 34-355 or 34-359;
(g) 34-376 and 34-377;
(h) one of 34-470 or 34-471
(i) one of 34-472 or 34-473
(j) one additional Philosophy course with ‘5’ as the middle digit;
(k) one 200-level or above Philosophy course with ‘6’ as the middle digit;
(l) 34-491;
(m) five additional Philosophy courses, at least three of which are at the 300-level.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) four other courses from any area of study, including Philosophy;
(c) eight other courses from any area of study, excluding Philosophy.

Combined Honours Programs

A student may combine Philosophy with any other area of study that also permits Combined Honours Programs.

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.

Major requirements-Philosophy: sixteen Philosophy courses, at least 14 of which must be at the 200-level or above, and including:
a) 34-110
(b) 34-221, and one additional Philosophy course with '2' as the middle digit;
(c) one of 34-250 or 34-254;
(d) 34-273;
(e) 34-276;
(f) one of 34-353, 34-472 or 34-473;
(g) one of 34-355, 34-470,or 34-471;
(h) one additional Philosophy course with '5' as the middle digit;
(i) one 200-level or above Philosophy course with '6' as the middle digit;
(j) 34-491;
(k) any five additional Philosophy courses, at least one of which is above the 200 level.

Major requirements-Other subject: as prescribed by that area of study.

Option requirements: six courses including
(a) two courses from Social Sciences;
(b) two courses from Languages or Science;
(c) two courses from any area of study, excluding Arts.

Other requirements:
(a) 01-150, 01-151;
(b) additional courses from any area of study to a total of forty courses.

Minor in Philosophy

Required: six Philosophy courses, with no more than two at the 100-level, and at least one at the 300-level or above.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 34-110, 34-112, 34-x2x, at least one of 34-250 or 34-254, 34-273, 34-276, at least one of 34-330, 34-352, 34-353, at least one of 34-555, 34-470, 34-471, at least one of 34-260, 34-261, 34-262, any two additional courses at the 200-level or above, 34-491.9 (Same thing, just make the two new mandatory)

Minor Concentration: 34-110 or 34-112, one of 34-330, 34-352, 34-353, four additional courses. No more than two courses at the 100-level.

PHILOSOPHY PROGRAM REGULATIONS

Academic Advising: All students majoring in Philosophy or intending to declare a Minor in Philosophy will be assigned an academic advisor. Students should plan their programs in consultation with their advisors prior to course selection each term. Students planning to take a Philosophy course as an option are welcome to consult the instructor.

Either 34-110 or 34-112 is a good introduction to Philosophy in general.

AREAS OF STUDY
Most philosophy courses are intended for students majoring in other subjects who desire a well-rounded liberal arts education, as well as for philosophy majors. Students who might want to take more than one philosophy course are advised to check the prerequisites of courses numbered in the 200s and 300s. 34-110 or 34-

112 are good introductions to philosophy in general.

PHILOSOPHY: COURSES

Fall 2015 Undergraduate Calendar

Foreword/Glossary

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PHYSICS

PROGRAMS

Honours Physics (with/without Co-op)
Honours Physics with thesis (with/without Co-op)
Honours Physics (Physics and High Technology) (with/without Co-op)
Honours Physics (Physics and High Technology) with thesis (with/without Co-op)
Honours Physics (Medical Physics) (with/without Co-op)
Honours Physics (Medical Physics) with thesis (with/without Co-op)
Other Combined Honours Programs
Minor in Physics
Major and Minor Concentrations - Bachelor of Arts and Science

Additional Information: GENERAL UNDERGRADUATE REGULATIONS

Honours Physics

Total courses: 40 (44 for co-op option)

Major requirements: eighteen courses, namely 64-140, 64-141, 64-151, 64-220, 64-222, 64-250, 64-310, 64-311, 64-320, 64-323, 64-350, 64-431, 64-450, and five courses in Physics at the 300 or 400 level.

Other requirements:
(a) thirteen courses 59-140, 59-141, 59-240, 60-140, 60-141, 62-120 (or 62-125), 62-140 (or 62-139), 62-141, 62-215, 62-216, 62-360, 85-234, 88-217 or 60-265.
(b) two of Arts (01-) and/or Social Sciences (02-).
(c) seven courses from any area.

For co-op stream, in addition:
(d) four co-op terms: 64-198, 64-298, 64-398, 64-498, (oral and written reports required). Students must maintain major and cumulative averages of 65% or better to qualify for co-op placements.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

If a student has an outstanding commitment to an employer, then withdrawal from the co-op program will be granted on an exception basis and will take effect following the work term. If a student withdraws from an undergrad co-op program they will be subject to the following co-op fee payments:

- If a student withdraws from co-op prior to the first Friday of classes of the semester following their first work term, no further co-op fees will be charged once the withdrawal has been processed.
- If a student withdraws from co-op after the first Friday of classes of the semester following their first work term, they be liable for paying the co-op fee for the term in which they are dropping and one additional term.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Recommended options (if any): Students who intend to take additional mathematics courses are advised to take 62-190 in first year. 60-212 is recommended. 60-340 and 62-318 are strongly recommended. Students planning to pursue health professions should seek advice from an academic advisor in the Department of Physics within the first year.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

Withdrawal from the co-op program will be granted on an exception basis only as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the 1st Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Honours Physics with thesis

Total courses: 40 (44 for co-op option)

Major requirements: nineteen courses (20 course equivalencies) , namely 64-140, 64-141, 64-151, 64-220, 64-222, 64-250, 64-310, 64-311, 64-320, 64-323, 64-350, 64-412 (6.0 credits)**, 64-431, 64-450, and five courses in Physics at the 300 or 400 level.

**Only students who have maintained a major average of 70% and a cumulative average of 60% will be permitted to enrol in 64-412.

Other requirements:
(a) thirteen courses 59-140, 59-141, 59-240, 60-140, 60-141, 62-120 (or 62-125), 62-140 (or 62-139), 62-141, 62-215, 62-216, 62-360, 85-234, 88-217 or 60-265.
(b) two of Arts (01-) and/or Social Sciences (02-).
(c) six courses from any area.

For co-op stream, in addition:
(d) four co-op terms: 64-198, 64-298, 64-398, 64-498, (oral and written reports required). Students must maintain major and cumulative averages of 65% or better to qualify for co-op placements.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

If a student has an outstanding commitment to an employer, then withdrawal from the co-op program will be granted on an exception basis and will take effect following the work term. If a student withdraws from an undergrad co-op program they will be subject to the following co-op fee payments:

- If a student withdraws from co-op prior to the first Friday of classes of the semester following their first work term, no further co-op fees

will be charged once the withdrawal has been processed.
- If a student withdraws from co-op after the first Friday of classes of the semester following their first work term, they be liable for paying the co-op fee for the term in which they are dropping and one additional term.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Recommended options (if any): Students who intend to take additional mathematics courses are advised to take 62-190 in first year. 60-212 is recommended. 60-340 and 62-318 are strongly recommended. Students planning to pursue health professions should seek advice from an academic advisor in the Department of Physics within the first year.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

Withdrawal from the co-op program will be granted on an exception basis only as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the 1st Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Recommended course sequence:

YEAR 1

Fall term

62-140 (or 62-139) Differential Calculus
64-140 Physics I
59-140 Chemistry I
62-120 (or 62-125) Linear algebra
Option 1

Winter term

62-141 Integral Calculus
64-141 Physics II
59-141 Chemistry II
64-151 From Symmetry to Chaos in the Universe: An Introduction to Theoretical Methods in Contemporary Physics
Option 2

YEAR 2

Fall term

62-215 Vector Calculus
62-216 Differential Equations
64-220 EM Fields and Photons
64-222 Optics
60-140 Introduction to Algorithms I

Winter term

64-250 Mechanics
60-141 Introduction to Algorithms II
Option 3
Option 4
60-265/88-217 Digital Logic Design I

YEAR 3

Fall term

62-360 Special Functions
64-350 Classical Mechanics I
64-320 Electromagnetic Theory
85-234 Electrical and Computing Fundamentals
59-240 Introductory Physical Chemistry I

Winter term

Option 5
Option 6
64-310 Quantum Physics and Chemistry
64-323 Electromagnetic Waves
64-3xx/4xx

YEAR 4

Fall term

64-311 Atomic and Molecular Spectra
64-3xx/4xx
64-3xx/4xx
64-3xx/4xx
Option 7 (or 64-412 for thesis option)

Winter term

64-450 Quantum Mechanics I
64-431 Introduction to Statistical Mechanics
64-3xx/4xx
Option 8
Option 9 (or 64-412 for thesis option)

Recommended course sequence for Co-op option

YEAR 1

Fall term

62-140 (or 62-139) Differential calculus
64-140 Physics I
59-140 Chemistry I
62-120 (or 62-125) Linear algebra
Option 1

Winter term

62-141 Integral Calculus
64-141 Physics II
59-141 Chemistry II
64-151 From Symmetry to Chaos in the Universe: An Introduction to Theoretical Methods in Contemporary Physics

Option 2

YEAR 2

Fall term

62-215 Vector Calculus
62-216 Differential Equations
64-220 EM Fields and Photons
64-222 Optics
60-140 Introduction to Algorithms I

Winter term

64-250 Mechanics
60-141 Introduction to Algorithms II
Option 3
Option 4
60-265/88-217 Digital Logic Design I

Summer term

64-198 Co-op Work term 1

YEAR 3

Fall term
62-360 Special Functions
64-350 Classical Mechanics I
64-320 Electromagnetic Theory
85-234 Electrical and Computing Fundamentals
59-240 Introductory Physical Chemistry I

Winter term

Option 5
Option 6
64-310 Quantum Physics and Chemistry
64-323 Electromagnetic Waves
64-3xx/4xx

Summer term

64-298 Co-op Work term 2

YEAR 4

Fall term

64-398 Co-op Work term 3

Winter term
64-498 Co-op Work term 4

YEAR 5

Fall term

64-311 Atomic and Molecular Spectra
64-3xx/4xx
64-3xx/4xx
64-3xx/4xx
Option 7 (or 64-412 for thesis option)

Winter term

64-450 Quantum Mechanics I
64-431 Introduction to Statistical Mechanics
64-3xx/4xx
Option 8
Option 9 (or 64-412 for thesis option)

Honours Physics (Physics and High Technology)

Total courses: 40 (44 for co-op option)

Major requirements: eighteen courses, namely 64-140, 64-141, 64-151, 64-220, 64-222, 64-250, 64-310, 64-311, 64-320, 64-323, 64-350, 64-431, 64-450, and five courses in Physics at the 300 or 400 level.

Other requirements:
(a) thirteen courses 59-140, 59-141, 59-240, 60-140, 60-141, 62-120 (or 62-125), 62-140 (or 62-139), 62-141, 62-215, 62-216, 62-360, 85-234, 88-217 or 60-265.
(b) 70-151 and 75-100
(c) two of Arts (01-) and/or Social Sciences (02-), and/or Business Administration (04).
(d) five courses from any area.

For co-op option, in addition:
(e) four co-op terms: 64-198, 64-298, 64-398, 64-498, (oral and written reports required). Students must maintain major and cumulative averages of 65% or better to qualify for co-op placements.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Student are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

If a student has an outstanding commitment to an employer, then withdrawal from the co-op program will be granted on an exception basis and will take effect following the work term. If a student withdraws from an undergrad co-op program they will be subject to the following co-op fee payments: If a student withdraws from co-op prior to the first Friday of classes of the semester following their first work term, no further co-op fees will be charged once the withdrawal has been processed.If a student withdraws from co-op after the first Friday of classes of the semester following their first work term, they be liable for paying the co-op fee for the term in which they are dropping and one additional term.

In the interest of building solid partnerships with employers, student who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Recommended options (if any): Students who intend to take additional mathematics courses are advised to take 62-190 in first year. 60-212 is recommended. 60-340 and 62-318 are strongly recommended. Students planning to pursue a minor in Business should seek advice from an academic advisor in the Odette School of Business in the first year.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

Withdrawal from the co-op program will be granted on an exception basis only as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the 1st Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Honours Physics (Physics and High Technology with thesis)

Total courses: 40 (44 for co-op option)

Major requirements: nineteen courses (20 course equivalencies), namely 64-140, 64-141, 64-151, 64-220, 64-222, 64-250, 64-310, 64-311, 64-320, 64-323, 64-350, 64-412 (6.0 credits)**, 64-431, 64-450, and five courses in Physics at the 300 or 400 level.

**Only students who have maintained a major average of 70% and a cumulative average of 60% will be permitted to enrol in 64-412.

Other requirements:
(a) thirteen courses 59-140, 59-141, 59-240, 60-140, 60-141, 62-120 (or 62-125), 62-140 (or 62-139), 62-141, 62-215, 62-216, 62-318, 62-360, 85-234, 88-217 or 60-265.
(b) 70-151 and 75-100
(c) two of Arts (01-) and/or Social Sciences (02-), and/or Business Administration (04).
(d) three courses from any area.

For co-op option, in addition:
(e) four co-op terms: 64-198, 64-298, 64-398, 64-498, (oral and written reports required).Students must maintain major and cumulative averages of 65% or better to qualify for co-op placements.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Student are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

If a student has an outstanding commitment to an employer, then withdrawal from the co-op program will be granted on an exception basis and will take effect following the work term. If a student withdraws from an undergrad co-op program they will be subject to the following co-op fee payments:

- If a student withdraws from co-op prior to the first Friday of classes of the semester following their first work term, no further co-op fees will be charged once the withdrawal has been processed.
- If a student withdraws from co-op after the first Friday of classes of the semester following their first work term, they be liable for paying the co-op fee for the term in which they are dropping and one additional term.

In the interest of building solid partnerships with employers, student who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Recommended options (if any): Students who intend to take additional mathematics courses are advised to take 62-190 in first year. 60-212 is recommended. Students planning to pursue a minor in Business should seek advice from an academic advisor in the Odette School of Business in the first year.

Students are invited to explore the Capstone Course Initiative offered by the Centre for Enterprise and Law to earn credit for the 62-412 Research course.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

Withdrawal from the co-op program will be granted on an exception basis only as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the 1st Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Recommended course sequence:

YEAR 1

Fall term

62-140 (or 62-139) Differential calculus
64-140 Physics I
59-140 Chemistry 1
60-140 Introduction to Algorithms I
Option 1

Winter term

62-141 Integral calculus
64-141 Physics II
59-141 Chemistry II
62-120 (or 62-125) Linear algebra
60-141 Introduction to Algorithms II

YEAR 2

Fall term

62-215 Vector Calculus
62-216 Differential Equations
64-220 EM Fields and Photons
64-222 Optics
59-240 Introductory Physical Chemistry I

Winter term

64-151 Introduction to Theoretical Methods
64-250 Mechanics
Option 2
Option 3
75-100 Introduction to Business

YEAR 3

Fall term

Option 4
62-360 Special Functions
64-350 Classical Mechanics I
64-320 Electromagnetic Theory
85-234 Electrical and Computing Fundamentals

Winter term

70-151 Principles of Financial Accounting
64-3xx/4xx
64-310 Quantum Physics and Chemistry
64-323 Electromagnetic Waves
60-265/88-217 Digital Logic Design I

YEAR 4

Fall term

64-311 Atomic and Molecular Spectra
64-3xx/4xx
64-3xx/4xx
64-3xx/4xx
Option 6 (or 64-412 for thesis option)

Winter term

64-450 Quantum Mechanics I
64-431 Introduction to Statistical Mechanics
64-3xx/4xx
Option 5
Option 7 (or 64-412 for thesis option)

Recommended course sequence for Co-op option:

YEAR 1

Fall term

62-140 (or 62-139) Differential calculus
64-140 Physics I
59-140 Chemistry 1
60-140 Introduction to Algorithms I
Option 1

Winter term

62-141 Integral calculus
64-141 Physics II
59-141 Chemistry II
62-120 (or 62-125) Linear algebra
60-141 Introduction to Algorithms II

YEAR 2

Fall term

62-215 Vector Calculus
62-216 Differential Equations
64-220 EM Fields and Photons
64-222 Optics
59-240 Introductory Physical Chemistry I

Winter term

64-151 Introduction to Theoretical Methods
64-250 Mechanics
Option 2
Option 3
75-100 Introduction to Business

Summer term
64-198 Co-op Work term 1

YEAR 3

Fall term
Option 4
62-360 Special Functions
64-350 Classical Mechanics I
64-320 Electromagnetic Theory
85-234 Electrical and Computing Fundamentals

Winter term
70-151 Principles of Financial Accounting
64-3xx/4xx
64-310 Quantum Physics and Chemistry
64-323 Electromagnetic Waves
60-265/88-217 Digital Logic Design I

Summer term

64-298 Co-op Work term 2

YEAR 4

Fall term

64-398 Co-op Work term 3

Winter term

64-498 Co-op Work term 4

YEAR 5

Fall term

64-311 Atomic and Molecular Spectra
64-3xx/4xx
64-3xx/4xx
64-3xx/4xx
Option 6 (or 64-412 for thesis option)

Winter term

64-450 Quantum Mechanics I
64-431 Introduction to Statistical Mechanics
64-3xx/4xx
Option 5
Option 7 (or 64-412 for thesis option)

Honours Physics (Medical Physics)

Total courses: 40 (44 for co-op option)

Major requirements: eighteen courses, namely 64-140, 64-141, 64-151, 64-220, 64-222, 64-250, 64-310, 64-311, 64-320, 64-323, 64-350, 64-370, 64-431, 64-450, 64-470, 64-471 and two more courses in Physics at the 300 or 400 level.

Other requirements:
(a) fifteen courses 55-141, 59-140, 59-141, 59-230, 59-240, 59-261, 60-140, 60-141, 62-120 (or 62-125), 62-140 (or 62-139), 62-141, 62-215, 62-216, 62-360, , 85-234.
(b) two of Arts (01-),and/or Social Sciences (02-).
(c) five courses from any area.

For co-op option, in addition:
(f) four co-op terms: 64-198, 64-298, 64-398, 64-498, (oral and written reports required). Students must maintain major and cumulative averages of 65% or better to qualify for co-op placements.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and

employers will make interview and hiring decisions. Student are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

If a student has an outstanding commitment to an employer, then withdrawal from the co-op program will be granted on an exception basis and will take effect following the work term. If a student withdraws from an undergrad co-op program they will be subject to the following co-op fee payments:

- If a student withdraws from co-op prior to the first Friday of classes of the semester following their first work term, no further co-op fees will be charged once the withdrawal has been processed.
- If a student withdraws from co-op after the first Friday of classes of the semester following their first work term, they be liable for paying the co-op fee for the term in which they are dropping and one additional term.

In the interest of building solid partnerships with employers, student who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Recommended options (if any): Students who intend to take additional mathematics courses are advised to take 62-190 in first year. 60-212 is recommended. 60-340 and 88-217 or 60-265 are strongly recommended. Students planning to pursue health professions other than Medical Physics should seek advice from an academic advisor in the Department of Physics within the first year.

For medical school, four (4) courses are recommended that are classified as “writing intensive.” (64-198, 64-498, 64- 412, and 64-496 all contain intensive writing components.)

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

Withdrawal from the co-op program will be granted on an exception basis only as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the 1st Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Recommended course sequence

YEAR I

Fall term

62-140 (or 62-139) Differential calculus
64-140 Physics I59-140 Chemistry I
62-120 (or 62-125) Linear Algebra
55-141 Cell Biology

Winter term

62-141 Integral Calculus
64-141 Physics II
59-141 Chemistry II
64-151 From Symmetry to Chaos in the Universe: An Introduction to Theoretical Methods in Contemporary Physic
Option 1

YEAR 2

Fall term

62-215 Vector Calculus
62-216 Differential Equations
64-220 EM Fields and Photons
64-222 Optics
60-140 Introduction to Algorithms I

Winter term

64-250 Mechanics I
64-370 Introduction to Medical Physics
59-230 Introductory Organic Chemistry
60-141 Introductions to Algorithms II
Option 2

YEAR 3

Fall term

62-360 Special Functions
85-234 Electrical and Computing Fundamentals
64-350 Classical Mechanics I
64-320 Electromagnetic Theory
59-240 Introductory Physical Chemistry I

Winter term

59-261 Organic Chemistry and Biomolecules
64-310 Quantum Physics and Chemistry
64-323 Electromagnetic Waves
Option 3 (recommend 60-340 C++)
Option 4

YEAR 4

Fall term

64-311 Atomic and Molecular Spectra
64-470 Radiological Physics
64-3xx/4xx
Option 5 (Recommend 60-265 Digital Logic Design I)
Option 6 (or 64-412 for thesis option)

Winter term

64-450 Quantum Mechanics I
64-431 Introduction to Statistical Mechanics
64-471 Introduction to Medical Imaging
64-3xx/4xx
Option 7 (or 64-412 for thesis option)

Recommended course sequence for Co-op option

YEAR I

Fall term

62-140 (or 62-139) Differential calculus
64-140 Physics I
59-140 Chemistry I
62-120 (or 62-125) Linear Algebra
55-141 Cell Biology

Winter term

62-141 Integral Calculus
64-141 Physics II
59-141 Chemistry II
64-151 From Symmetry to Chaos in the Universe: An Introduction to Theoretical Methods in Contemporary Physics

Option 1

YEAR 2

Fall term

62-215 Vector Calculus
62-216 Differential Equations
64-220 EM Fields and Photons
64-222 Optics
60-140 Introduction to Algorithms I

Winter term

64-250 Mechanics I
64-370 Introduction to Medical Physics
59-230 Introductory Organic Chemistry
60-141 Introductions to Algorithms II
Option 2

Summer term

64-198 Co-op Work term 1

YEAR 3

Fall term

62-360 Special Functions
85-234 Electrical and Computing Fundamentals
64-350 Classical Mechanics I
64-320 Electromagnetic Theory
59-240 Introductory Physical Chemistry I

Winter term

59-261 Organic Chemistry and Biomolecules
64-310 Quantum Physics and Chemistry
64-323 Electromagnetic Waves
Option 3 (recommend 60-340 C++)
Option 4

Summer term

64-298 Co-op Work term 2

YEAR 4

Fall term

64-398 Co-op Work term 3

Winter term
64-498 Co-op Work term 4

YEAR 5

Fall term

64-311 Atomic and Molecular Spectra
64-470 Radiological Physics
64-3xx/4xx
Option 5 (Recommend 60-265 Digital Logic Design I)
Option 6 (or 64-412 for thesis option)

Winter term

64-450 Quantum Mechanics I
64-431 Introduction to Statistical Mechanics
64-471 Introduction to Medical Imaging
64-3xx/4xx
Option 7 (or 64-412 for thesis option)

Honours Physics (Medical Physics with thesis)

Total courses: 40 (44 for co-op stream)

Major requirements: nineteen courses (20 course equivalencies), namely 64-140, 64-141, 64-151, 64-220, 64-222, 64-250, 64-310, 64-311, 64-320, 64-323, 64-350, 64-370, 64-412 (6.0 credits)**, 64-431, 64-450, 64-470, 64-471, and two more courses in Physics at the 300 or 400 level.

**Only students who have maintained a major average of 70% and a cumulative average of 60% will be permitted to enrol in 64-412.

Other requirements:
(a) fifteen courses 55-141, 59-140, 59-141, 59-230, 59-240, 59-261, 60-140, 60-141, 62-120 (or 62-125), 62-140 (or 62-139), 62-141, 62-215, 62-216, 62-318, 62-360, 85-234.
(b) two of Arts (01-) and/or Social Sciences (02-).
(c) three courses from any area.

For co-op option, in addition:
(d) four co-op terms: 64-198, 64-298, 64-398, 64-498, (oral and written reports required). Students must maintain major and cumulative averages of 65% or better to qualify for co-op placements.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Student are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

If a student has an outstanding commitment to an employer, then withdrawal from the co-op program will be granted on an exception basis and will take effect following the work term. If a student withdraws from an undergrad co-op program they will be subject to the following co-op fee payments:

- If a student withdraws from co-op prior to the first Friday of classes of the semester following their first work term, no further co-op fees will be charged once the withdrawal has been processed.
- If a student withdraws from co-op after the first Friday of classes of the semester following their first work term, they be liable for paying the co-op fee for the term in which they are dropping and one additional term.

In the interest of building solid partnerships with employers, student who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Recommended options (if any): Students who intend to take additional mathematics courses are advised to take 62-190 in first year. 60-212 is recommended. 60-340 and 88-217 or 60-265 are strongly recommended.

Students planning to pursue health professions other than Medical Physics should seek advice from an academic advisor in the Department of Physics within the first year.

For medical school, four (4) courses are recommended that are classified as “writing intensive.” (64-198, 64-498, 64- 412, and 64-496 all contain intensive writing components.)

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

Withdrawal from the co-op program will be granted on an exception basis only as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the 1st Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Recommended course sequence:

YEAR I

Fall term

62-140 (or 62-139) Differential calculus
64-140 Physics I
59-140 Chemistry I
60-140 Introduction to Algorithms I
55-141 Cell Biology

Winter term

62-141 Integral Calculus
64-141 Physics II
59-141 Chemistry II
60-141 Introductions to Algorithms II
62-120 (or 62-125) Linear Algebra

YEAR 2

Fall term

62-215 Vector Calculus
62-216 Differential Equations
64-220 EM Fields and Photons
64-222 Optics
59-240 Introductory Physical Chemistry I

Winter term

Option 1
64-151 Introduction to Theoretical Methods
64-250 Mechanics I
64-370 Introduction to Medical Physics

59-230 Introductory Organic Chemistry

YEAR 3

Fall term

62-360 Special Functions
85-234 Electrical and Computing Fundamentals
64-350 Classical Mechanics I
64-470 Radiological Physics
Option 2

Winter term

59-261 Organic Chemistry and Biomolecules
64-310 Quantum Physics and Chemistry
64-471 Introduction to Medical Imaging
Option 3 (recommend 60-340 C++)
Option 4

YEAR 4

64-320 Electromagnetic Theory
64-311 Atomic and Molecular Spectra
64-3xx/4xx
Option 5 (Recommend 60-265 Digital Logic Design I)
Option 6 (or 64-412 for thesis option)

Winter term

64-323 Electromagnetic Waves
64-450 Quantum Mechanics I
64-431 Introduction to Statistical Mechanics
64-3xx/4xx
Option 7 (or 64-412 for thesis option)

Recommended course sequence for Co-op option:

YEAR I

Fall term

62-140 (or 62-139) Differential calculus
64-140 Physics I
59-140 Chemistry I
60-140 Introduction to Algorithms I
55-141 Cell Biology

Winter term

62-141 Integral Calculus
64-141 Physics II
59-141 Chemistry II
60-141 Introductions to Algorithms II
62-120 (or 62-125) Linear Algebra

YEAR 2

Fall term

62-215 Vector Calculus
62-216 Differential Equations
64-220 EM Fields and Photons
64-222 Optics
59-240 Introductory Physical Chemistry I

Winter term

Option 1
64-151 Introduction to Theoretical Methods
64-250 Mechanics I
64-370 Introduction to Medical Physics
59-230 Introductory Organic Chemistry

Summer term

64-198 Co-op Work term 1

YEAR 3

Fall term

62-360 Special Functions
85-234 Electrical and Computing Fundamentals
64-350 Classical Mechanics I
64-470 Radiological Physics
Option 2

Winter term

59-261 Organic Chemistry and Biomolecules
64-310 Quantum Physics and Chemistry
64-471 Introduction to Medical Imaging
Option 3 (recommend 60-340 C++)
64-3xx/4xx

Summer term

64-298 Co-op Work term 2

YEAR 4

Fall term

64-398 Co-op Work term 3

Winter term

64-498 Co-op Work term 4

YEAR 5

Fall term

64-320 Electromagnetic Theory
64-311 Atomic and Molecular Spectra
64-3xx/4xx
Option 4 (Recommended 60-265 Digital Logic Design I
Option 5 (or 64-412 for thesis option)

Winter term

64-323 Electromagnetics Waves
64-450 Quantum Mechanics I
64-431 Introduction to Statistical Mechanics
64-3xx/4xx
Option 6 (or 64-412 for thesis option)

Other Combined Honours Programs

Total courses: forty.

Major requirements - Physics: thirteen courses, consisting of 64-140, 64-141, 64-151, 64-220, 64-222, 64-250, 64-310, 64-311, 64-320, 64-323, 64-350, and two more Physics courses at the 300 or 400 level.

Major requirements - Other Subject: as prescribed by that area of study.

Other requirements:
(a) 59-140, 59-141, 59-240, 62-120, 62-140, 62-141, 62-215, 62-216;
(b) any additional, non-major requirements as determined by the second area of study;
(c) additional courses, if necessary, from any area of study, to a total of forty.

Minor in Physics

The minor in Physics consists of successfully completing each of : 64-140, 64-141, 64-151, 64-220, 64-222, and 64-250, and requires a minimum average of 60%.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 64-220, 64-222, 64-250, 64-320, 64-350, 64-323, 64-310, 64-311, 62-215, 62-216, 62-360, and one other Physics course at 300 or 400 level. (Other requirements: 64-140, 64-141, 62-140 and 62-141, and 62-120.

Minor Concentration: 64-220, 64-222, 64-250, and three other courses at the 300 or 400 level. (Other requirements: 64-140, 64-141, 62-120, 62-140, 62-141.)

PHYSICS: COURSES
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WOMEN'S AND GENDER STUDIES

PROGRAMS

General BA in Women's Studies
Honours BA in Women's Studies
Combined Honours Women's Studies
Combined Honours Women's Studies when taken with Criminology
Honours Bachelor of Social Work and Women's Studies (Combined Honours)
Certificate in Women's Studies
Major and Minor Concentrations - Bachelor of Arts and Science
Minor in Women's Studies

Additional Information: Women's Studies Emphasis Courses
GENERAL UNDERGRADUATE REGULATIONS

General BA in Women's Studies

Total courses: thirty.

Major requirements: ten courses, including
(a) 53-100, 53-301;
(b) 53-200/43-251;
(c) at least one of 53-201/48-251, or 53-202;
(d) one of 53-300/34-359, or 53-305;
(e) at least two of 53/54-206, 45/53-211, 53-230, 53-260, 53-310, 53-320/48-353, 53-330, 53-340;
(f) three Women's Studies or Women-Emphasis courses.

Option requirements: six courses including
(a) two courses from Arts;
(b) two courses from Languages or Science*;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) six courses from any area of study, including Women's Studies (53-);
(c) six courses from any area of study, excluding Women's Studies (53-).

*53-220 will satisfy a Science requirement for non-Science majors for students in the Faculty of Arts, Humanities, and Social Sciences.

BA Honours in Women's Studies

Total courses: forty.

Major requirements: twenty courses, including
(a) 53-100, 53-202, 53-301, 53-400, 53-410;
(b) 53-200/43-251;
(c) 53-201/48-251;
(d) 53-300/34-359 or 53-305;
(e) at least two of 53/54-206, 45/53-211, 53-230, 53-260, 53-310, 53-320/48-353, 53-330, 53-340;
(f) one Women's Studies or Women-Emphasis course at the 100-level;
(g) nine additional Women's Studies or Women-Emphasis courses

Option requirements: six courses, including
(a) two courses from Arts;
(b) two courses from Languages or Science*;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) six courses from any area of study, including Women's Studies (53);
(c) six courses from any area of study, excluding Women's Studies (53-).

*53-220 will satisfy a Science requirement for students in the Faculty of Arts, Humanities and Social Sciences.

Combined Honours Women's Studies

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the Option requirements, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the Option requirements and one course from section (b) of the Option requirements should be excluded from the degree requirements.

Total courses: forty.

Major requirements-Women's Studies: fourteen courses
(a) 53-100, 53-202, 53-301, 53-400, 53-410;
(b) 53-200/43-251;
(c) 53-201/48-251;
(d) 53-300/34-359 or 53-305;
(e) at least two of 53/54-206, 45/53-211, 53-230, 53-260, 53-310, 53-320/48-353, 53-330, or 53-340*;
(f) one Women's Studies or Women-Emphasis course at the 100-level;
(g) three additional Women's Studies or Women-Emphasis courses.

Major requirements-Other Subject: as prescribed by that area of study.

Option requirements: six courses, including
(a) two courses from Arts;
(b) two courses from Languages or Science**;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:
(a) 01-150, 01-151;
(b) additional courses from any area of study a total of forty courses.

*Any course(s) not taken in category (e) can be taken in category (g) (except any cross-listed course numbers).
**53-220 will satisfy a Science requirement for students in the Faculty of Arts, Humanities and Social Sciences.

Combined Honours Women's Studies <u>when taken with Criminology</u>

Program Regulation:
Students in combined programs must complete the major requirements for both subject areas, and 01-150 and 01-151. They must also complete the *Option requirements*, in the order presented, followed by any additional requirements under *Other requirements*, to a total of forty courses. *Example*: If the total course requirements add up to 43 once the major requirements for the second subject area are included, then section (c) of the *Option requirements* and one course from section (b) of the *Option requirements* should be excluded from the degree requirements.

Total courses: forty.*Major requirements-Women's Studies:* fourteen courses
(a) 53-100, 53-301;
(b) 53-200/43-251;
(c) at least one of 53-201/48-251 or 53-202;
(d) at least one of 53-275 or 53-375; (please note that these courses are in development; they are currently being offered under special topics course codes)
(e) 53-300/34-359 or 53-305;
(f) at least one of 02-350, 53-330, or 53-345;
(g) at least one of 53-400 or 53-410;
(h) at least two of 53/54-206, 45/53-211, 53-230, 53-260, 53-310, or 53-340;
(i) one Women's Studies or Women-Emphasis course at the 100-level;
(j) three additional Women's Studies or Women-Emphasis courses.

Major requirements-Other Subject: as prescribed by that area of study.

Option requirements: six courses, including
(a) two courses from Arts;
(b) two courses from Languages or Science**;
(c) two courses from any area of study, excluding Social Sciences.

Other requirements:

(a) 01-150, 01-151;
(b) additional courses from any area of study a total of forty courses.

*Any course(s) not taken in categories (c), (d), (f), (g), or (h) can be taken in category (j) (except any cross-listed course numbers).
**53-220 will satisfy a Science requirement for students in the Faculty of Arts, Humanities and Social Sciences.

Certificate in Women's Studies

Total courses: ten.

Requirements:
(a) 53-100 and 53-200 (or 43-251);
(b) at least one of 53-201 (or 48-251) or 53-202;
(c) at least one of 53-300 (or 34-359 or 53-305)or 53-301;
(d) at least one of 53-211 (or 45-211), 53-260, 53-310, 53-320 (or 48-353), or 53-390:
(e) five Women's Studies or Women-Emphasis courses, with at least one at the 100-level.

Major and Minor Concentrations - Bachelor of Arts and Science (BAS)

Major Concentration: 53-100, 53-200 or 43-251, 53-201 or 48-251, 53-202; at least one of 53-300, 34-359, 53-305, or 53-301; at least two of 53-211, 45-211, 53-260, 53-310, 53-320, 48-353, 53-340, or 53-390; , one Women's Studies/Women-Emphasis course at the 100-level or above, one Women's Studies/Women-Emphasis course at the 200-level or above, three Women's Studies/ Women-Emphasis courses at the 300-level or above.

*Minor Concentration:*six Women's Studies (53-) courses, including 53-100; and one Women's Studies (53-) course at the 300- or 400-level, no more than one other course may be at the 100-level.

Minor in Women's Studies

Requirements: six Women's Studies (53-) courses, including 53-100 and one Women's Studies (53-) course at the 300- or 400-level; no more than one other course may be at the 100-level.

Women's Studies Emphasis Courses

Program requirements in Women's Studies make reference to Women-Emphasis courses. These currently include: English 26-128, 26-301; Languages, Literatures and Cultures 08-262, History 43-249, 43-250, 43-336, 43-361, 43-362; Psychology 46-240, 46-440, 46-445; Social Work 47-458; Sociology 48-204, 48-205, 48-306, 48-329, 48-351, 48-352, 48-354, 48-408, 48-409, 48-450, 48-461, 48-465; Anthropology 49-214,49-352, 49-354; Nursing 63-241; and Kinesiology 95-405.

Various areas of study from time to time offer courses dealing specifically with women under specific course titles or general titles such as, "Special Topics", "Directed Readings", or "Seminars". Information regarding such courses will be available from a program advisor in Women's Studies and they may be taken with permission of the program.

WOMEN'S AND GENDER STUDIES: COURSES

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Main University Secretariat

The Schulich School of Medicine and Dentistry – Windsor Program

Launched in Fall 2008, the Schulich School of Medicine & Dentistry – Windsor Program is based on a distributed medical education model involving a partnership between the Schulich School of Medicine & Dentistry at the University of Western Ontario (UWO), the University of Windsor, and regional hospitals. This partnership builds on the Southwestern Ontario Medical Education Network (SWOMEN) which was initiated in 2002 to optimize medical education opportunities in the area and address the shortage of physicians across the region. All students will be fully registered at UWO and will receive UWO degrees. Twenty-four students are admitted to the Windsor Program annually.

For more information go to: http://www.uwindsor.ca/medicine and http://www.schulich.uwo.ca/education/index.php?page=FAQ2

Regulations

Students in the Windsor Program are subject to the academic regulations of the University of Western Ontario and its Schulich School of Medicine & Dentistry. University of Windsor non-academic policies and procedures govern student conduct on the University of Windsor campus.

Admission and Program Information

For admission and program information visit the University of Western Ontario Schulich School of Medicine & Dentistry website at: http://www.schulich.uwo.ca/education/ume/index.php

Student Services at the University of Windsor

Although fully registered at UWO, students in the Windsor Program have “affiliate” student status at the University of Windsor, with access to University of Windsor services and facilities.

The University of Windsor Medical Education Building

The Medical Education Building, a new state-of-the-art “green” facility, houses the Windsor Program. In addition to being built using sustainable materials, efficient energy systems, regional materials and recycled content, the facility includes a living wall, made up of plants, to act as a bio-filter to enhance air quality in the building.

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Main University Secretariat

Certificate in Border Management and International Trade *(Approved by MTCU)*

Total courses: 8

Requirements: 69-300, 69-310, 69-315, 69-320, 69-325, 69-330, 69-335, 69-340.

Other Requirements: Students must demonstrate level of competency aligned with course/program learning outcomes on a pass/fail grade in accordance with relevant rubrics.

Information About the Certificate in Border Management and International Trade

The Certificate Program in Border Management and International Trade bridges the traditional disciplines and creates a distinctive learning environment that aims to address emerging trends in the global economy. Border management refers both to the execution of customs, security and immigration functions by government agencies and to the administration of customs and other trade compliance, cross-border supply chains security and cross-border movement of personnel by private sector firms. Career paths in Border Management and International Trade include service in border related government agencies; international trade professionals such as customs brokers/managers and freight forwarders; logistics analysts and managers, storage and distribution managers, supply chain managers and supply chain security specialists; and international sales and marketing managers. The skills acquired in this program will also help owners and managers of small and medium sized firms expand their markets across international borders.

In addition to the University of Windsor's certificate, the program leads to professional certification by the Forum for International Trade Training (FITT) including a Level I Certificate (4 courses), Level II Certificate (8 courses) and the Certified International Trade Professional (8 courses plus one year of experience.) For details on FITT certification go to http://www.fitt.ca/home

New students (including mature students and professionals) apply via **Ontario Universities' Application Centre (OUAC)**.

For more information, please, contact: CROSSBORDER@uwindsor.ca

Course sequence

COURSES: Cross Border Management and International Trade

69-300. The Global Business Environment and Intercultural Aspects of Integrative Trade

The aim of this course is to provide each learner with an overview of the role of border agencies and the principles of border management. This course raises participants' awareness of the intricacies involved in the communication process with various government agencies, border officials, and business partners and equips participants with specific techniques for effective communication in a variety of business situations. Attentiveness to the ethical dimension of business in a global setting is cultivated within each learner and decision-making models for resolving ethical dilemmas are utilized. The integrative trade approach is introduced within a cross-border and international trade environment and intercultural aspects of such trade are considered. In particular, learners focus on recognizing, understanding, and respecting differences in trading practices due to cultural influences. (This is a four-week course. 9 lecture hours/week) (Graded on a pass/fail basis - percentage grade optional.)

69-310 International Trade Law, Policy and the Political Environment

This course focuses on how to use the border, by discussing practical implications of cross-border trade from various stakeholders' perspectives, including government, business professionals, and entrepreneurs. This course provides learners with a contextual understanding of policy and the political environment in international trade while exploring practical implications for border users. Topics explored include existing legal mechanisms that govern international trade, including corporate law, tax law, and trade compliance practice s. Emphasis is placed on understanding the risks associated with integrative trade and

developing contingency strategies to protect organizations. The course engages learners on an individual basis to develop and share their diverse perspectives. Learners will benefit from an array of guest speakers from the Government of Canada, stressing the importance of the tools, access, and support needed to reach and succeed in global markets. (This is a four-week course. 9 lecture hours/week) (Graded on a pass/fail basis - percentage grade optional.)

69-315 Supply Chain and Border Management
In this course, participants will gain an in-depth understanding of customs procedures and services offered by freight forwarders and customs brokers. This course aims to help learners manage the relationships associated with multiple directional flows of goods and services in a complex, global system. Learners increase their understanding of existing, and evolving, rules and regulations that govern international trade to ensure compliance for the international import/export of goods and services. Learners also develop technical and systems knowledge pertaining to transportation modes, distribution, and logistics. (This is a four-week course. 9 lecture hours/week) (Graded on a pass/fail basis - percentage grade optional.)

69-320 International Business Development, Operations and Planning
In this course, learners gain essential knowledge and skills to expand a business internationally. Key considerations and activities for international business are explored alongside cross-border opportunities and challenges. Correspondingly, learners develop core competencies in business planning, understanding the roles of government agencies, managing strategic alliances, working with multinational workforces, and identifying different sources of funding. Relationships between funding initiatives, government policy, and an organization's objectives are examined. Course participants utilize tools to develop growth-focused business and entrepreneurial strategies that reflect a dynamic understanding of rules and regulations that govern international trade – equipping the manager/entrepreneur with the ability to tackle international business growth in accordance with trade compliance for effective and seamless flow of cross-border goods and services. (This is a four-week course. 9 lecture hours/week) (Graded on a pass/fail basis - percentage grade optional.)

69-325 International Investment and Growth Strategy
This course equips learners with the tools to identify and evaluate market entry options against a company's objectives and abilities. Participants learn how to perform a company strategic-needs assessment and determine potential barriers to market entry. Barriers such as regulatory, legal, political, environmental, and cultural vary by case; in turn, a custom, multi-faceted market entry strategy needs to be designed for each case, inclusive of these considerations. The role of free trade agreements and foreign investment promotion are explored to enhance competition across a range of sectors. Participants learn how to identify potential international partners to help bring a company into foreign markets. Finally, participants learn how to negotiate global partnership agreements, and monitor their compliance, to ensure mutual benefit between parties. (This is a four-week course. 9 lecture hours/week) (Graded on a pass/fail basis - percentage grade optional.)

69-330 International Trade Compliance
This course equips learners with various tools to plan, and carry out, trade research effectively and efficiently. Research addresses evolving rules and regulations that govern international trade to poise the learner with the necessary skills to inquire into, and stay abreast of, current developments and regulation. To ensure compliance related to the import/export activities of goods and services and, at the same time promote an authentic international business objective, participants learn to use market intelligence to identify the most promising foreign markets and international business opportunities. (This is a four-week course. 9 lecture hours/week) (Graded on a pass/fail basis - percentage grade optional.)

69-335 International Risk Management and Trade Finance
This course covers the nature and scope of international trade finance. In particular, facilitating trade payment flows across a network of relationships is addressed to ensure effective trade activities. The course topics include the provision of information for a global trade transaction, commercial and country risks that may be encountered during import-export operations, and risk management and mitigation how to manage and mitigate these risks. Risk-mitigation techniques are discussed in terms of legal implications and appropriate practices and the use of these techniques. Participants develop a financial plan for a company's short-, medium- and long-term needs, including essential data considerations for cash flow analysis. (This is a four-week course. 9 lecture hours/week) (Graded on a pass/fail basis - percentage grade optional.)

69-340 International Marketing and Regulatory Environment

This course identifies the main principles of international marketing and introduces learners to market intelligence, promotional strategies, and e-marketing in order to trade and sell products and/or services globally. Participants learn to recognize the influence of culture, politics, law, and regulatory considerations in international markets alongside building and maintaining international trade relationships with all levels of government. Participants learn why companies must adapt their products and/or services for international markets; in turn, participants prepare a promotional strategy tailored to this objective and the aforementioned considerations in an authentic context. One of the intentions of the course is for participants to develop an international marketing plan designed to assist reaching international marketing and sales goals while considering the domestic and international political contexts that the business operates in. (This is a four-week course. 9 lecture hours/week) (Graded on a pass/fail basis - percentage grade optional.)

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FACULTY OF ARTS AND SOCIAL SCIENCES (02-)

AERONAUTICS LEADERSHIP: COURSES

GROUND OPTION

02-196. Introduction to Aeronautics Leadership
Introduction to leadership training in the aeronautics field. Includes a 3 day leadership training session held just prior to the Fall term. Teamwork and submission of portfolio entries required. Marked on a pass/fail basis. 3 credits. (Restricted to students in the LAPS Aeronautics Leadership Ground Option program.

02-396. Internship in Aeronautics Leadership
Internship in leadership training in the aeronautics field. Work experience internship placement in the aviation industry, including the submission of portfolio entries. Internship placements are subject to availability, qualifications and acceptance by an airlines partner. (Marked on a pass/fail basis. 6 credits. Restricted to students in the LAPS Aeronautics Leadership Ground Option program.) (Pre-requisite:02-196)

02-496. Aeronautics Leadership Capstone Seminar
A capstone seminar in which students plan, gain approval for, carry out and present a research project relevant to the ground operations in the aviation industry. Restricted to students in the LAPS Aeronautics Ground Option program. (Marked on a pass/fail basis. 6 credits.) (Pre-requisite:02-196)

PILOT OPTION

02-197. Practicum in Professional Development, Pilot Training
Supervised practicum in professional development in pilot training. Introduction to leadership training, and aviation theory and practice. Includes a 3 day leadership training session held just prior to the Fall term. Completion of year one of pilot training plus submission of satisfactory portfolio entries to the supervising instructor required. (Marked on a pass/fail basis. Two semester course. 6 credits. Restricted to students in LAPS Pilot option program.)

02-297. Practicum in Professional Development, Pilot Training
Supervised practicum in professional development in pilot training. Leadership training, navigation and meteorology. Completion of year two of pilot training plus submission of satisfactory portfolio entries to the supervising instructor required. (Marked on a pass/fail basis. Two semester course. 6 credits. Restricted to students in LAPS Pilot option program.) (Pre-requisite: 02-197)

02-397. Practicum in Professional Development, Pilot Training
Supervised practicum in professional development in pilot training. Leadership training on health and safety issues. Completion of year three of pilot training plus submission of satisfactory portfolio entries to the supervising instructor required. (Marked on a pass/fail basis. Two semester course. 6 credits. Restricted to students in LAPS Pilot option program.) (Prerequisite: 02-297)

02-497. Practicum in Professional Development, Pilot Training
Supervised practicum in professional development in pilot training. Leadership and management of flight crews and passenger safety. Completion of one year of post-pilot license training plus submission of satisfactory portfolio entries to the supervising instructor required. (Marked on a pass/fail basis. Two semester course. 6 credits. Restricted to students in LAPS Pilot option program.) (Pre-requisite: 02-397)

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SOCIOLOGY, ANTHROPOLOGY AND CRIMINOLOGY: COURSES

Not all courses listed will necessarily be offered each year. All courses are three hours a week unless otherwise indicated.

Anthropology Courses include the following list:
48-213. Perspectives on Culture; 48-214. Gender and Culture; 48-215. Principles of Physical Anthropology; 48-218. Principles of Archaeology;48-240. Introduction to Race and Ethnicity; 48-323. Forensic Anthropology; 48-327. Social Movements; 48-333. Nationalism and Ethnic Conflict; 48-336. Health, Culture and Society; 48-338. Material Culture; 48-339. Migration in the Globalized World; 48-340. Food and Global Sustainability; 48-352. Citizenship, Rights, and Social Justice; 48-354. Gender, Space, and Time; 48-356. Cultural Theory; 48-375. Social Justice and Global Change; 48-390. Qualitative Approaches to Social and Cultural Research; 48-411. Advanced Seminar in Global Development; 48-412. Human Skeletal Variation; 48-415. Advanced Seminar in Culture, Power, and Globalization; 48-419. Advanced Seminar in Public Anthropology; 48-425. Social Life in the City Capstone; 48-428. Advanced Seminar in Labour and Globalization; 48-447. Social Justice Practicum.

48-100. Understanding Social Life
Understanding society through the exploration of contemporary social issues. (48-100 is intended as a course for students who are not majors or minoring in Sociology, Criminology, Anthropology, and Family and Social Relations programs.) (Students who complete 48-100 may subsequently enroll in 48-110 for credit.)

48-110. Foundations of Social Life
This course will introduce students to the key concepts, theories, and methods appropriate to Sociology, Anthropology, and Criminology. Focus will be on application of issues important to studying social life using multiple perspectives while exercising the sociological imagination. Topics may include discussion of culture, gender, social stratification, race and ethnicity, family, and crime and deviance. (Open only to Program Majors and Minors in the Department of Sociology, Anthropology, and Criminology). (48-110 is a prerequisite for all 200 level courses and above in the Department). (Students who complete 48-110 may not subsequently enroll in 48-100 for credit). (Credit may not be obtained for both 48-110 and 48-101/48-102.)

48-204. Sociology of Families
Sociological perspectives on cross-cultural variations and changes in family forms. Topics may include discussion of marriage, kinship, family structure and organization of intimate relationships. (Prerequisites: 48-100 or 48-110/101.)

48-205. Sociology of Sexualities
An analysis of sexual differentiation, sex role acquisition, sexual attitudes, sexual behaviour, and the sex structure of Canadian society. (Prerequisites: 48-100 or 48-110/101.)

48-213. Perspectives on Culture
An examination of the emergence, development, meaning, and idea of culture. The different ways the concept is used in applied anthropology and sociology, ethnographic research, and popular discourse are discussed. (Prerequisite: 48-100 or 48-110/101.) (Credit may not be obtained for both 48-213 and 49-213).

48-214. Gender and Culture
Current perspectives in anthropology on the intersection of gender and culture. Examines cross-culturally the themes of gender relations, concepts of masculinity and femininity, and gender-related power and politics. (Prerequisite: 48-100 or 48-110/101.) (Credit may not be obtained for both 48-214 and 49-214).

48-215. Principles of Physical Anthropology
A study of humans as biological beings, humans in evolutionary context and their specializations; their nearest living relatives and varieties. Sources and the nature of variations in living human populations; significance of the variations and the concept of race; approaches to the problems of evolution of human populations. (Prerequisite: 48-100 or 48-110/101 or consent of the instructor.) (Credit may not be obtained for both 48-215 and 49-215).

48-216. Education and Society
This course employs sociological perspectives on education as central to social reproduction (in the transmission of knowledge, skills and values), as well as its place within broader social struggles and the creation and maintenance of social inequalities. Central theories are reviewed in light of empirical studies. Topics may include: schools as agents of socialization, stratification in education, social mobility, schooling and the labour market, cross-cultural educational practices, alternative forms of schooling, peer group influence, higher education, teacher-student relations, apprenticeships, arts-training, and the challenges associated with school violence. (Prerequisites: 48-100 or 48-110/101.)

48-217. Religion and Society
This course investigates religion as a social institution, examining beliefs, symbols, relations and practices. Central theories and methods are reviewed in light of historical and cross-cultural variations. Interactions with culture, education, family, community, the economy, and politics are considered. Topics may include: the sacred and the profane, secularization, myth, totemism, cults, fundamentalisms, integration, exclusion, violence, new religions and/or new age movements. (Prerequisites: 48-100 or 48-110/101.)

48-218. Principles of Archaeology
A survey of the history, theory, and methods of anthropological archaeology. Emphasis is placed on archaeology's role as a social science, aimed at documenting and explaining past human cultural behaviour. (Prerequisite: 48-100 or 48-110/101 or consent of the instructor.) (Credit may not be obtained for both 48-218 and 49-217).

48-225. Work and Organizations
An examination of the changing world of work from a variety of theoretical perspectives. The course examines workplace organization, including management strategies and workers' responses. Special topics include: work in the automobile, clothing, or other specific industries, contemporary changes in work organization and organizational issues involving class, ethnicity, and gender. (Also offered as Labour Studies 54-225.) (Prerequisites: 48-100 or 48-110/101 or 54-100)

48-227. Globalization, Development and Social Change
This course examines such issues as the impact of colonialism on global poverty and trade policies, global restructuring, neoliberal policies, global governance, poverty alleviation efforts, cultural resistance, gendered patterns of development, population displacements and popular responses to globalization. (Prerequisites: 48-100 or 48-110/101.)

48-228. Class, Wealth and Power in Canada
The study of structured social inequality. The existence of class and power structures and their effects on the lives of Canadians. The relation of different forms of inequality based on class, ethnicity, and gender. The various strategies people employ to respond to inequality. (Prerequisites: 48-100 or 48-110/101 or 54-100.)

48-240. Introduction to Race and Ethnicity
An introduction to race and ethnic relations, with global and Canadian perspectives, which may draw on both sociological and anthropological literature. Topics may include Canadian cultural, indigenous, ethnic and racial identities; multiculturalism; im/migration and integration; separatist movements; pursuit of collective rights; transnationalism and diaspora. (Prerequisites: 48-100 or 48-110/101 or consent of instructor.) (Credit may not be obtained for both 48-240 and 49-240).

48-251. Women, Sexuality and Social Justice
This course examines the personal and cultural meanings of women’s sexual identities in Canada today. Students consider how these identities are created and experienced in conjunction with other identities such as race/ethnicity, social class, and (dis)ability and how women challenge the personal, social, political, and economic inequities that continue to be based on these identities. Students are encouraged to analyze how their beliefs and behaviours are shaped by heterosexual privilege.(Also offered as Women's Studies 53-201.) (Prerequisites: 48-100 or 48-110/101 and 53-100)

48-260. Introduction to Criminology
Theories and research in crime causation, the nature and extent of crime, and

policy responses. (Prerequisites: 48-100 or 48-110/101)

48-262. Law and Social Order
This course will examine the creation and administration of law and justice. Topics may include: legal systems, legal and justice professionals, civil and criminal law, courts and sanctions. Focus of the course will vary by instructor. (Prerequisites: 48-100 or 48-110/101)

48-290. Researching Social Life
Introduction to social research with focus on guiding students through the research process. This includes: constructing a research problem; conducting a literature review; evaluating journal articles; understanding research ethics; and becoming familiar with quantitative and qualitative research methods. At the end of the course, it is expected that students will obtain a Research Ethics Certificate (TCPS2). (Prerequisites: 48-110/101; students must be in semester 3 of their program to register for this course)

48-291. Theorizing Social Life
This course is an introduction to social theory with focus on classical approaches and how classical approaches inform contemporary social theories. Students learn how to think conceptually and theoretically; how social theories including diverse approaches to society, class, inequality, institutions and culture, for example, are constructed by key thinkers in sociology and related disciplines. (Prerequisites: 48-110/101 students must be in Semester 3 of their program to register for this course.)

48-301. Sociology of Childhood
This course explores the experience of childhood as a moment within the human life cycle, yet one subject to great variation according to the family and social context. Students will become familiar with ongoing debates about the nature of children and childhood, the concept of socialization, the role and place of children in family, social, and economic life, as well as children's own agency in shaping their lived experience. (Prerequisites: 48-204 and semester 5 or higher standing.)

48-305. Sexuality and Health
Contemporary topics in sexuality and health examined from Canadian and international perspectives, such as HIV and AIDS, sexual health movements, and the social construction of sexual dysfunction. (Prerequisite: 48-205 and semester 5 or higher standing)

48-306. Sociology of Women
An overview of the economic, educational, familial, political, and religious factors affecting the position of women in society. A socio-historical analysis of the change in the roles and status of women in Canada and internationally with a view to understanding the nature of their impact upon major societal institutions. (Semester 5 or higher standing).

48-308. Intermediate Statistics
Basic inferential statistics, including estimation, confidence intervals, and hypothesis testing. Also included is the application of computer packages to selected statistical problems. (Prerequisite: 02-250, 48-290/210 (or equivalent), and semester 5 or higher standing.) (Credit can only be obtained for one of 46-313 or 48-308.) (2 lecture hours, 1 laboratory hour a week.)

48-321. Formal Organizations in Comparative Perspective
An examination of the organization of work in national and cultural contexts. The focus is on the influence of societies, including their traditions, languages, and institutions on the organization of work. This course examines organizations in comparative perspective, looking at Japanese or other managerial strategies in industrialized and newly industrializing countries. (Prerequisites: 48-225 or 54-100 and semester 5 or higher standing)

48-323. Forensic Anthropology
An overview of anthropological methods as applied to death investigations. Topics may include detection, recovery, and examination of human remains; problems of identification and individualization; and the reconstruction of events that occurred around the time of death. (Prerequisite: 48-215, and semester 5 or higher standing.) (Credit may not be obtained for both 48-323 and 49-323).

48-326. Jobs, Careers, and the Labour Market
An examination of occupations and the changing labour market. This course examines the ways people choose occupations and develop careers, the nature of professions and professionalization, unemployment and its consequences, and

the influence of occupations on individuals and society in a wider sense. Special topics include the impact of technological change on the occupational structure of younger and other populations. (Prerequisites: 48-225 or 54-100 and semester 5 or higher standing (Also offered as Labour Studies 54-326.)

48-327. Social Movements
An examination of theories and case studies of world revolutions, class struggles, and various social movements, such as the feminist, gay and lesbian, labour, native, ecological, and other movements. (Also offered as 54-327) (Prerequisites: 48-110/101 or 54-100 and semester 5 or higher standing) (Credit can only be obtained for one of 48-327, 49-327 or 54-327).

48-329. Contemporary Families
Examines the empirical sociological literature on families and their formation in the context of postwar change with emphasis on the Canadian experience, including key demographic trends such as the rise of cohabitation and two-earner families, and changes in divorce rates. (Prerequisites: 48-204 and semester 5 or higher standing

48-332. Labour and the Industrialization Process
The development of Canadian industry and workers' responses to industrialization are examined. Special topics may include early industrialization and its effects, the development of monopoly capitalism, the emergence of service and other new industries, the impact of new technologies, changes in the division of labour, the impact of globalization and economic restructuring, the development of new management approaches such as lean production, changes in women's work, the development of labour unions, and the role of women, youth, and minorities at work. (Prerequisites: 48-225 or 54-100 and semester 5 or higher standing). (Also offered as 54-332; Credit may not be obtained for both 48-332 and 54-332.)

48-333. Nationalism and Ethnic Conflict
An analysis of ethnic identity, ethnic group formation, ethnopolitical mobilization, nationalism, racism, ethnic conflicts, ethnic violence including genocide, and conflict resolution in various societies throughout the world. (Prerequisites: 48-240 and semester 5 or higher standing) (Credit may not be obtained for both 48-333 and 49-333).

48-336. Health, Culture and Society
A survey of the social, cultural and political dimensions of health, drawing on both anthropological and sociological perspectives. The course provides a global perspective to address multiple issues in the study of health and illness, including relations between culture and health, the political economy of health, and globalization and health. Topics may include: specific health issues, different models of health, critical analysis of Western medicine/health models, and HIV/AIDS studies.(Prerequisites: 48-291/202 or 48-213, and semester 5 or higher standing.) (Credit may not be obtained for both 48-336 and 49-336).

48-338. Material Culture
An examination of the representation and interpretation of the material artifacts of culture in a global context, including theoretical approaches to objects and cultural products. Topics may include cultural products and commodities, places and museums, media and visual displays, and consumption and technologies. (Prerequisites: 48-213 or 48-291/202, and semester 5 or higher standing). (Credit may not be obtained for both 48-338 and 49-338).

48-339. Migration in the Globalized World
An examination of the relationship between migration, culture and globalization. It explores the way migrants draw on and change cultural practices in 'host' countries such as Canada. It also analyzes labour migration in the context of the global political economy as well as the global management and integration of immigration. Topics may include migrant rights, identity formation, political movements, cultural struggles; generational tensions, trans-national practices and multicultural politics. (Prerequisites: 48-213, 48-227 or 48-240, and semester 5 or higher standing). (Credit may not be obtained for both 48-339 and 49-339). .

48-340. Food and Global Sustainability
This course offers a comparative examination of the emergence of a global food system and its implications for culture, environment, working conditions, health, and population movements. (Prerequisite 48-227 and semester 5 or higher standing.) (Credit may not be obtained for both 48-340 and 49-340).

48-341. Human-Animal Studies
A sociologically-informed examination of the growing field of human-animal

studies, focusing on the effects of social, legal, political, economic, technological, and cultural change on our relations with and representations of nonhuman animals. Topics covered may include examining the socio-political constructions of animals, policies governing the (ab)use of animals, consumptive practices involving animals, use of animals for leisure and entertainment, and intersectional conceptions of social, environmental and species justice. (Prerequisites: semester 5 or higher standing.)

48-350. Practical Strategies for Social Change: Intervening to Prevent Sexual Assault
This course provides male and female students with an introduction to sexual violence as a social problem. The course addresses how this social problem manifests, why it matters, how it persists, and finally, how it can be changed. The importance of personal and community responsibility for social change is emphasized. This course also provides students with the background knowledge that is needed to successfully teach sexual assault prevention education sessions for fellow students, using the *Bringing in the Bystander® In Person Prevention* workshop. Selected students will deliver the workshop by taking Practicum in Social Change (02-450/46-450/47-450/48-451/53-450) the following semester. Restricted to students who have attained a cumulative GPA of 66% or higher at the time of application. (Prerequisite: Semester 4 standing or above and permission of the instructor by online application at uwindsor.ca/bystander.) (Also offered as 02-350, 46-350, 47-350, and 53-351.)

48-351. Gay and Lesbian Studies
A multidisciplinary review of critical issues in the social organization and representation of same-sex bonding, including discussion of: cross-cultural studies, historical constructions of homosexuality and romantic friendship, coming out and identity, relationships and family, theories of homophobia and sexual repression, the development of communities and social movements in modern societies, the impacts of AIDS, and the emergence of queer theory. (Prerequisites: 48-205 and semester 5 or higher standing.)

48-352. Citizenship, Rights, and Social Justice
An examination of the impact of the ‘global’ on social and economic processes, human rights and struggles over rights in specific locales worldwide. Topics may include: gender-based violence, poverty and ‘development’, children’s rights, changing labour practices; human rights principles and institutions; and cultural and political struggles for rights in European, North American, and post-colonial settings (Prerequisite: 48-213 or 48-291/202, 48-214, and semester 5 or higher standing.) (Credit may not be obtained for both 48-352 and 49-352). .

48-353. Women, Power, and the Environment
This course focuses on environmental issues as they affect women across cultures. It provides a feminist critical analysis of the power relations in modern societies that cause environmental degradation and examines the theories, policies, and institutions that contribute to unsustainable practices. Emphasis is placed on the women-nature debate within various environmental social movements and the historical role women have played as activists. (Also offered as Women's Studies 53-320.) (Prerequisite: Semester 5 or higher standing and one course at the 200-level or above from Women’s Studies.)

48-354. Gender, Space, and Time
An examination of sociological and anthropological approaches to the study of space-time relations within the field of gender studies, including a focus on the development of gendered environments and cultural practices. (Also offered as Women’s Studies 53-354.) (Prerequisites: 48-214 or 53-100 and semester 5 or higher standing.) (Credit may not be obtained for both 48-354 and 49-354).

48-356. Cultural Theory
Through a selective examination of social theory, this seminar examines key ideas that inform identities and reflect contemporary issues. Topics may include: race, culture and ethnicity, colonial and post-colonial theory. (Prerequisite: 48-213 and semester 5 or higher standing) (Credit may not be obtained for both 48-356 and 49-356).

48-361. Youth in Conflict with the Law
The course covers theories of delinquency causation, the youth justice system, Youth Criminal Justice Act, prevention, and treatment programs. (Prerequisites: 48-260, 48-262, and semester 5 or higher standing).

48-362. Victimology
Victimology is a subfield of criminology that Focuses on victims within the study of

crime. Topics explored may include: victimology patterns, the process and aftermath of the victimization experience, the involvement and treatment of victims in the criminal justice system, legal remedies and services available to victims, restorative justice initiatives, and victims' rights. (Prerequisites: 48-260, 48-262, and semester 5 or higher standing).

48-363. Penology
Study of the correctional institution including the impact of prison on inmates, the prison subculture, prison architecture, and administration, special institutions, and the assessment of education, occupational, recreational, and treatment programs. (Prerequisites: 48-260, 48-262, and semester 5 or higher standing).

48-365. Green Criminology
This course will introduce undergraduate students to green criminology, a new and growing sub-field within criminology examining harms (criminal and otherwise) perpetrated against the environment and human and non-human animals. It examines the conceptual and theoretical developments within this field, as well as specific substantive harms, the various layers of actors involved, and the potentials and limitations of regulation. (Prerequisites: 48-260, 48-262 and semester 5 or higher standing).

48-367. Corporate and Governmental Crime
This course focuses on understanding corporate and governmental crime and criminal activities of organizational and institutional actors. Issues addressed may include government corruption, genocide, environmental crime, occupational health and safety, food safety, combine offenses, securities and various other kinds of fraud. The development and enforcement of criminal and civil corporate law will be examined along with different theoretical perspectives on criminal behaviour. (Prerequisites: 48-260, 48-262 and semester 5 or higher standing)

48-368. Policing and Security
This course will provide an overview of the development of public policing and security in Canadian society. Topics will include the history, development, organization, role and mandate of public policing. The course will also introduce students to the concept of security and will cover interpretive models for assessing how policing and security are governed and practiced both in Canada and internationally (Prerequisites: 48-260, 48-262, and semester 5 or higher standing).

48-370. Selected Topics in Criminology
Course content varies by instructor and can be taken more than once if content changes. Details about the course will be made available through the department. (Prerequisites: 48-260, 48-262, and semester 5 or higher standing.)

48-371. Drugs and Society
Using a sociological perspective, this course aims to provide a foundation for the critical understanding of drugs and society. In particular, this course explores the various processes (i.e., social, cultural, political, economic) that shape our understanding of and policies towards drugs and drug use in historical and contemporary society. (Prerequisites: 48-260, 48-262, and semester 5 or higher standing.)

48-373. Contemporary Criminological Theory
A review of modern theoretical approaches in criminology. (Prerequisites: 48-260 and 48-262 and semester 5 or higher standing.)

48-374. Crime, Media and Culture
This course explores the relationships between crime, crime control, media and popular culture by focusing on the theoretical understanding of the interplay between crime, media and culture, how crime and crime control are represented through various forms of media, and the potential effects of various media on crime and crime control policy. Focus and topics may vary by instructor. (Prerequisite: 48-260; 48-262; and semester 5 or higher standing).

48-375. Social Justice and Global Change
An examination of issues of social justice arising from the intensification of social and economic inequalities within an increasingly globalized world. Topics may include the emerging international human rights framework, national and transnational struggles to bring about social change, and post-colonialism. (Prerequisites: 48-227 or 38-101 and semester 5 or higher standing). (Credit may not be obtained for both 48-375 and 49-375).

48-382. Surveillance and Society
The course provides an overview of surveillance in contemporary society.

Substantive topics may include surveillance in relation to national security, covert police activities, social media, consumers, workplace, biometrics and inequality, social sorting, privacy, and privacy law/regulation. Focus of the course will vary by instructor. (Prerequisites: 48-260; 48-262; and semester 5 or higher standing).

48-390. Qualitative Approaches to Social and Cultural Research
An exploration and application of interpretive research strategies. Student will be taught to employ various techniques as they bear on real world issues and research questions. Techniques may include for example, participant observation, historical comparative analysis, oral histories, interviewing, cultural and discourse analysis. Students are expected to hold their TCPS certificate and learn to apply ethical issues specific to the interpretive and qualitative methodologies employed in the course. (Prerequisites: 48-290/210 (or equivalent), 48-291/202, and semester 5 or higher standing) (Credit may not be obtained for both 48-390 and 49-390).

48-391. Contemporary Social Theory
Investigates influential contemporary approaches to understanding and explaining social life. Emphasis is placed on epistemology, ontology and normativity, and on critically evaluating and creatively using theory. Theories covered may include Symbolic Interactionism, Structural-Functionalism, Phenomenology, Structuralism, Neo-Marxism, Psychoanalysis, Feminism, Postmodernism, and Postcolonialism among others. (Prerequisite: 48-291/202, 48-290/210 (or equivalent), and semester 5 or higher standing.)

48-397. Selected Topics in Sociology
Course content will vary by instructor. This course may be taken more than once if content changes. (Prerequisites: semester 5 or higher standing.)

48-403. Advanced Seminar in Culture and Ideology
The study of the influence of social location on human understanding, including the social organization, creation, and distribution of knowledge. Topics may include how social practices shape scientific knowledge, the origins of common sense and conventional wisdom, how politics affect medical definitions, and cultural constructions of class, gender, race, and sexuality. (Prerequisite: 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.)

48-405. Advanced Seminar in Social Theory
An exploration of contemporary social theory as it bears on sociology and related disciplines. Theoretical approaches examined will vary by instructor. (Prerequisite: 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.)

48-408. Advanced Seminar in Feminism
This course explores contemporary feminist thought; it includes the application of feminist theories to the understanding of social issues, political engagement and cultural struggles. Key topics may include diversity and identities, globalization, the politics of pleasure, reproductive politics, gender, sexualities, and social movements. (Prerequisite: 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.)

48-409. Advanced Seminar in Family, Gender and Culture
A critical examination of key issues and debates in multiple family forms and relations in contemporary society. The course will adopt a cross-cultural approach examining and analyzing family forms and processes with emphasis on the intersectionalities of gender, culture, age, ethnicity, and class. (Prerequisites: 48-204, 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.)

48-411. Advanced Seminar in Global Development
A critical examination of theories and policies of global development and underdevelopment, including explorations of alternatives to modernization. (Prerequisites: 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.) (Credit may not be obtained for both 48-411 and 49-411).

48-412. Human Skeletal Variation
This course is an advanced critical review of theories and methods for collecting, analyzing, and interpreting data from human skeletal remains in bioarchaeological (paleopathology, paleodemography, etc.) and forensic contexts. Students will learn to pursue a biocultural approach for the study of human skeletal variation. (Prerequisite: 48-323, 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355),

48-308 and semester 7 or higher standing, or consent of instructor.) (Students can not receive credit for both 48-412 and 49-412). (Credit may not be obtained for both 48-412 and 49-412).

48-415. Advanced Seminar in Culture, Power, and Globalization
A critical and substantive examination of culture in a global context, including cultural practices, political economy and culture, culture and representation and culture and identity. Topics may include: material culture, commodities and cultural products; colonialism; globalization; ideas of place and time; transnational networks. (Prerequisites: 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.) (Credit may not be obtained for both 48-415 and 49-415).

48-416. Survey Research Capstone
The design, implementation, and analysis of sample surveys of topical and timely issues related to social life. (Prerequisite: 48-290/210 (or equivalent), 48-308, and three 200 or 300-level courses; a minimum of 73% in the program; semester 7 or higher standing, and permission of the instructor) (3 lecture hours, or 2 lecture hours, one tutorial/laboratory hour a week.)

48-419. Advanced Seminar in Public Anthropology
Contemporary approaches to “real world” problems, political struggles, and social debates. Questions about the role of anthropologists (as advocates, activists, applied researchers and writers) are explored within the shifting contexts of global and community dynamics. Students will consider how ethnographic knowledge informs contemporary publics. Topics may include: identity politics, post-colonial struggles, development and health research, social policy, and popular culture. (Prerequisites: 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.) (Credit may not be obtained for both 48-419 and 49-419).

48-421. Special Topics in Sociology and Criminology
Topics may vary by instructor; consult the departmental website for details. (Prerequisites: 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.) (May be repeated for credit if content changes.)

48-422. Advanced Seminar on Race and Ethnicity
This course explores theoretical approaches to race and ethnicity with a focus on political and cultural struggles and issues encountered by racialized and ethnic minorities. Topics may include: multicultural politics, anti-racist strategies, transnational and diasporic mobilization, and in intersectionality. (Prerequisites: 48-240; 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.)

48-425. Social Life in the City Capstone
The course is designed to give advanced students the opportunity to engage in qualitative research projects on social issues and cultural practices in the Windsor-Essex Region. (Prerequisites: a 73% in the program, 48-391/302 or 48-356; 48-390/310 (or 48-355); and semester 7 or higher standing and permission of the instructor). (Credit may not be obtained for both 48-425 and 49-425).

48-428. Advanced Seminar in Labour and Globalization
An examination of the impact of contemporary globalization on work life and working class economic and political mobilization. Particular emphasis is placed on a comparative study of labour movement strategies with a view to understanding the nationally specific and cross national character of these responses. (Also offered as 54-428.) (Prerequisites: 48-326 or 54-301; 48-391/302 or 48-356; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.) (Credit may not be obtained for both 48-428 and 49-428).

48-429. Advanced Seminar in Family Theory
Discussion of major themes in family theory, which may include explanations for family forms, functioning, processes and structure. (Prerequisites 48-204, 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.)

48-447. Social Justice Practicum
This course offers students the opportunity to apply their academic knowledge within community organization settings. Students will be given the opportunity to learn about the day-to-day operation and structure of a participating social justice agency through observation of, and discussion with, staff and executive members. Students will be assigned a major project to carry out for the agency under the

supervision of the course instructor and an on-site practicum supervisor. Students will be expected to meet regularly with the course instructor and to provide oral and written reports on their experience during the term. (Prerequisites: 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing.) (Course enrollment is limited and a letter of application is required.) **.**) (Credit may not be obtained for both 48-447 and 49-447).

48-450. Advanced Seminar in Sexualities and Identities
A critical engagement with the historical, contemporary and newly burgeoning sociological approaches to sexualities and sexual identities. The course will adopt a cross-cultural approach in examining and analyzing human sexualities, with emphasis on the intersectionalities of other forms of inequality such as gender, race, ethnicity, disability, and class. Topics may vary from year to year. (Prerequisite: 48-205, 48-391/302 or 48-356 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing, or consent of instructor.)

48-451. Practicum in Social Change
Supervised practicum in a university setting. Students consolidate and enhance their knowledge of sexual assault and bystander intervention. Students co-facilitate the *Bringing in the Bystander® In Person Prevention* program for one or more small groups of students on campus. The practicum experience equips students to deliver educational content on sensitive issues. (Prerequisite: 02-350/46-350/47-350/48-350/53-351 and permission of the instructor.) (Also offered as 02-02-450, 46-450, 47-450, and 53-450)

48-460. Advanced Seminar in Constructions of Deviance
This course explores theory and research concerned with constructions of deviant behavior and social issues. It involves the application of constructionist theory to a variety of behaviours and issues including the role of moral entrepreneurs, symbolic crusades and the medicalization on deviance. Substantive topics will vary by instructor. (Prerequisites: 48-260, 48-391/302 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing; at least one 300-level course from the 300 level criminology course selection, or consent of instructor.)

48-461. Advanced Seminar in Law and Social Policy
This course explores theory and research concerned with legal and government policies and their impact on individuals, social institutions and society. Substantive topics will vary by instructor. (Prerequisites: 48-391/302 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing; at least one 300-level course from the 300 level criminology course selection or consent of instructor.)

48-464. Advanced Seminar in Sociology of Law
An investigation of theory and research in the sociology of law. Topics may include the social construction of law, the legal profession, law and social change, legal consciousness, law as governance, legal avoidance, moral regulation, and popular representations of law. Criminal and other forms of law will be discussed in relation to these topics. Focus of the course will vary by instructor. (Prerequisites: 48-391/302 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing; at least one 300-level course from the 300 level criminology course selection; or consent of instructor.)

48-465. Advanced Seminar in Gender, Law, and Crime
This course will examine the ways gender intersects with the law and crime. It focuses on the importance of taking gender into consideration in understanding offending and victimization, the development and impacts of legislation, and the work of the criminal justice system. Focus of the course will vary by instructor. (Prerequisites: 48-391/302 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing; at least one 300-level course from the 300 level criminology course selection; or consent of instructor.)

48-467. Criminology Professional Development Practicum
This practicum provides students in the Criminology program with the opportunity to apply learned concepts and theory to a practical setting and to become further familiarized with an area related to Criminology. Students will be placed in organizations in the Windsor-Essex region related to their area of interest within Criminology (*e.g.,* the law, corrections, *etc.*) and will be expected to dedicate a total of 100 hours to both the in-class learning and practicum components of the course. Additionally, students will be required to complete assignments as assigned by the instructor. This course is open to Criminology majors only. (Prerequisites: 48-260, 48-262, 48-373 or 48-391/302, semester 7 orr higher standing, and minimum major average of 73%.)

48-491. Advanced Seminar in Criminology

This course exposes students to advanced criminological topics through the lens of the instructor's current research. Practical and/or theoretical implications of the research within local, national, global and/or cyberspace communities will be examined. Topics will vary by instructor. (Prerequisites: 48-260; 48-262; 48-391/302 or 48-373; 48-390/310 (or 48-355), 48-308 and semester 7 or higher standing; at least one 300-level course from the 300 level criminology course selection; or consent of instructor.)

48-496. Honours Essay
Independent research or internship conducted under the supervision of an individual faculty member. (Prerequisites: 48-391/302 or 48-356 or 48-373, 48-308; 48-390/310 (48-355); and semester 7 or higher standing; or consent of instructor.)

ANTHROPOLOGY

49-111. Introduction to Physical Anthropology and Archaeology
An introduction to the biological evolution of humanity and the cultural evolution of human society, including a consideration of the significance of humanity's evolutionary past for an understanding of the contemporary world.

49-112. Culture in Comparative Perspective
An introduction to the variety of human cultures throughout the contemporary world. An examination of the significance of cultural anthropology for overcoming the barriers preventing the understanding of other cultures and ourselves.

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ARTS AND SCIENCE: COURSES

56-100. Introduction to Interdisciplinary Arts and Science
This course examines how various academic disciplines contribute to integrative understanding. The course examines the history of interdisciplinary studies and different models of integration. Students will develop skills in interdisciplinary research and problem solving, in oral and written communication, and in the synthesis of diverse perspectives. (Open only to students in the BAS program).

56-301. World Civilizations
An introduction to the politics, culture and history of world civilizations. Focus will vary from year to year, depending on the interests of the instructor. (Open only to students in the BAS program.)

56-310. Modes and Methods of Inquiry
This course introduces methodological themes and principles that span disciplines across the Arts and Sciences, with an emphasis on developing skills for the critical appraisal of research literature. The course will enable students to become critical readers of published research in a variety of disciplines. (Open only to students in the BAS program.)

56-410. Inquiry and Communication
An examination to inquiry-based learning with a focus on contemporary political and social issues emphasizing the professional preparation and presentation of research results. This course is designed to provide experiences with planning, developing, and writing a research proposal under individual faculty supervision. In addition, group sessions on research ethics, procedures, writing, and data analysis will be provided. (Open only to students in the BAS program.) (Prerequisite: 56-310.)

56-420. Research Project
Students will design and implement a research project under the supervision of a faculty member integrating methodologies, critical perspectives and theoretical approaches acquired in the core BAS program. (Open only to students in the BAS program.) (May be repeated once for credit.)

56-421. Science, Ethics and Social Policy
Students will explore the ethical dimensions of contemporary scientific controversies and their implications for social policy. The focus will vary from year to year but may include such topics as stem cell research, invitro-fertilization, and global warming, emphasizing the role of scientific and ethical arguments in policy formation. (Open only to students in the BAS Program) (Prerequisite: 56-310.)

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BIOLOGICAL SCIENCES: COURSES

Students must normally have completed the prerequisites indicated, but under special circumstances may be permitted to take a particular course with the consent of the instructor.
Not all courses listed will necessarily be taught each year. Where enrollment limits are placed on specific courses, students who require these courses as part of their program will be given preference.

55-100. Biology of Organisms
Genetics, energetics, and the diversity of life. Properties of living organisms from the level of the cell through tissues, organs and organ systems, to the functioning, integrated organism. This course is offered on-campus and as a distance course (previously 55-102). (Intended for non-majors and students requiring preparation for 55-140 and 55-141.) (Not counted for credit in any Faculty of Science program.) (2 lecture hours a week.)

55-101. Organisms and the Environment
Organisms interacting with other organisms and with their physical environment. Ecological impacts of human activity. This course is offered on-campus and as a distance course (previously 55-103). (Intended for non-majors and students requiring preparation for 55-140 and 55-141.)(Not counted for credit in any Faculty of Science program.) (2 lecture hours a week.)

55-140. Biological Diversity
Principles governing living systems; the origins and diversity of life; evolution, reproduction, and heredity; the structure and function of viruses through plants and animals; basic principles of ecology. (Grade 12“U” Biology or equivalent, or 55-100 and 55-101 are strongly recommended) (3 lecture, 3 laboratory hours a week.)

55-141. Cell Biology
Examination of the principles governing living systems, with emphasis on the molecular and cellular basis of life, molecular genetics, energetics, differentiation, and development. (Grade 12 “U” Biology or equivalent, or 55-100 and 55-101 are strongly recommended) (3 lecture, 3 laboratory hours a week.)

55-175. Anatomy and Physiology I
This introductory course will expose the beginning nursing student to the foundations of anatomy and physiology within the context of nursing and health. Review of the systems will incorporate not only the anatomy and physiology of the system, but its relevance and importance to the care of the patient. Practical laboratory work will complement lectures and integrate theory with clinical application and health assessment I. (3 lecture, 2 laboratory hours every other week). (Co-requisite 63-166) (Pre-requisite: Nursing Student) (Cross-listed with 63-175).

55-177. Anatomy and Physiology II
This course is a continuation of Anatomy and Physiology I (63-175/55-175). The nursing student will continue to learn the foundations of anatomy and physiology within the context of nursing and health sciences. Continued review of the systems not covered in Anatomy and Physiology I will incorporate not only the anatomy and physiology of the system, but its relevance and importance to the care of the patient. Practical laboratory work will complement lectures and integrate theory with clinical application and health assessment II. (3 lecture, 2 laboratory hours every other week). (Co-requisite 63-176) (Pre-requisite 63-175 or 55-175). (Cross-listed with 63-177).

55-202. Human Anatomy
Systemic analysis of the structure of the human body, including gross and microscopic morphology. Topics include anatomical terminology and structures of cells, tissues and the major organ systems. Practical laboratory work will complement lectures with emphasis on gross dissection. (Prerequisites: any two first year biology courses.) (3 lecture, 2 laboratory hours a week.)

55-203. Introductory Molecular Biology
Basic introduction to the molecular biology of the cell with emphasis on basic life processes in both plants and animals, including metabolism, energy

transformations, transport mechanisms, signal transduction, and other general functions. The major topics covered include: Regulation of eukaryotic gene expression, fundamental aspects of recombinant DNA technology, DNA cloning, hybridization analysis, microarrays, and protein structure and function. (Antirequisite: 55-213; Prerequisite: 55-140 and 55-141) (3 lecture hours or equivalent a week.) (A distance course restricted to graduates of programs in Medical Technology from a College of Applied Arts and Technology with more than 100 hours of certified laboratory experience; or by consent of the instructor.)

55-204. Human Physiology I
Introduction to human physiology: a systems approach. Topics include homeostasis and feedback control, enzymes and energy, membrane transport, metabolism, and the nervous, skeletal muscle, and cardiovascular systems. This course is offered on-campus and a distance course. (Prerequisites: any two first year biology courses.) (3 lecture hours a week.)

55-205. Human Physiology II
Introduction to human physiology: a systems approach. Topics include respiratory, endocrine, digestive and renal systems, and control of metabolism. (Prerequisite: 55-204 or consent of instructor.) (3 lecture hours a week.)

55-208. Plants and Society
Earth's biosphere is the product of plant activity and animal life is ultimately dependent on plants. This course provides a introduction to the relationship between humans and plants, particularly economically important plants and their products, as sources of food, flavours, drugs, stimulants, fuel and industrial raw materials. Conservation , international programs, and introduction of genetically modified plants will be discussed. (Prerequisite: 55-140 and 55-141 or permission of the instructor.) (3 lecture hours.)

55-210. Ecology
Introduction to the fundamental concepts of ecology including factors affecting species distribution, reproductive strategies, population growth and regulation, species interactions, and community level organization and energetics. (Prerequisites: 55-140 and 55-141.) (3 lecture, 3 laboratory/discussion hours a week.)

55-211. Genetics
The course reviews transmission genetics and principles of inheritance. The material also includes non-nuclear inheritance and gene linkage, gene expression and regulation, mechanisms and phenotypic effects of DNA mutation and repair, and the principles and applications of population and quantitative genetics. Students will be exposed to molecular genetic techniques such as PCR and DNA sequencing. (Antirequisite: 55-212; Prerequisite: 55-140 and 55-141.) (3 lecture, 3 laboratory hours a week.)

55-212. Genetics
The course reviews transmission genetics and principles of inheritance. The material also includes non-nuclear inheritance and gene linkage, gene expression and regulation, mechanisms and phenotypic effects of DNA mutation and repair, and the principles and applications of population and quantitative genetics. Students will be exposed to molecular genetic techniques such as PCR and DNA sequencing. This is a distance course designed primarily for graduates of programs in Medical Technology from a College of Applied Arts and Technology. This course may not count as a major requirement for Biology Majors. (Antirequisite: 55-211; prerequisites: 55-140 and 55-141, or the equivalent.) (3 lecture hours or equivalent a week.)

55-213. Introductory Molecular Biology
Basic introduction to the molecular biology of the cell with emphasis on basic life processes in both plants and animals, including metabolism, energy transformations, transport mechanisms, signal transduction, and other general functions. The major topics covered include: Regulation of eukaryotic gene expression, fundamental aspects of recombinant DNA technology, DNA cloning, hybridization analysis, microarrays, and protein structure and function. Practical laboratory work will complement the lectures. (Antirequisite: 55-203; Prerequisite: 55-140, 55-141, and 55-211; suggested Corequisite: 59-261.) (3 lecture, 3 laboratory hours or equivalent a week.)

55-237. Introductory Microbiology
Growth, genetics, structure, physiology, and diversity of microbes and viruses. This course is offered on-campus and as a distance course. (Previously 55-206.) (Prerequisites: any two first year biology courses; Antirequisite: 55-238.) (3 lecture

hours a week.)

55-238. Introductory Microbiology and Techniques
Growth, genetics, structure, physiology, and diversity of microbes and viruses. (Antirequisites: 55-206, 55-237; prerequisites: 55-140 and 55-141.) (3 lecture, 3 laboratory hours a week including follow-up visits outside scheduled times)

55-258. Principles of Neuroscience
This course is meant to serve as a survey course that will provide familiarity with and an understanding of the basic principles of Neuroscience. The main emphasis will be on the morphology of neural systems, processes of neural signalling and communication, and how such basics relate to sensory processes and behaviour. The main purposes of the course are to provide a background for students interested in, and those taking higher level courses related to the neurosciences. (Prerequisites: 55-140, 55-141, and 55-204 (or 95-205 or 95-260), or permission of instructor.) (3 lecture hours.)

55-310. Environmental Physiology
This course is designed to introduce students to the diversity of adaptations possessed by organisms (including humans) enabling them to successfully interact with and survive in their abiotic/biotic environments. Topics will include overviews of the mechanisms organisms use to balance energetics, homeostasis and metabolism in environments varying in temperature, water availability, resources and oxygen. Descriptions of these systems will be supplemented frequently with the current methods that medical-, field- and laboratory-based researchers use to investigate these physiological adaptations to the environment. (Prerequisite: 55-210 or consent of instructor) (3 lecture hours, 1 tutorial hour a week)

55-320. Experimental Principles and Design in Biology
Introduction to the logic and principles used to develop sound and efficient studies in the biological sciences: generating, testing, and discriminating among hypotheses; dealing with unwanted sources of variation; assumptions and appropriate choice of statistical analysis. Instruction in the use of selected network and personal computer software for data analysis and presentation. (Prerequisites: 55-210, 55-211, 55-213, and 65-205, or consent of instructor.) (3 lecture, 2 laboratory/tutorial hours a week.)

55-323. Animal Behaviour
This course will emphasize the link between organisms and their environment. The thrust of the course will be to understand why different species behave in different ways and why within species there may be individual differences in behaviour. The aim of the course is to derive a basic understanding of how animals have evolved behaviours that aid in survival and reproduction. Students will gain experience by participating in activities throughout the term. (Prerequisites: 55-210, 55-211, and 55-213, or permission of instructor.) (3 lecture hours a week.) (Students cannot receive credit for both 55-425 and 55-323.)

55-324. Population Ecology
Topics of current interest in population theory including population growth and regulation, plant-herbivore interactions, optimal strategies of foraging, reproductive allocation, and the evolutionary responses of populations. (Prerequisites: 55-210 and 55-211.) (3 lecture hours a week.)

55-325. Community Ecology
Topics of current interest in community theory including predation and competition, species diversity and resource utilization, community energetics, and the relationship between complexity and stability of communities. (Prerequisite: 55-210.) (3 lecture hours a week.)

55-340. Fishes and Fisheries
The fishes are the most diverse, the oldest, and the most abundant group of vertebrates on earth. This course surveys their evolution, their phylogenetic relationships, and their morphological, physiological, behavioural, and ecological adaptations to life in virtually every aquatic environment on earth. The laboratory includes units on gross anatomy of a typical actinopterygian fish, identification of local fauna, study of age and growth, and other selected topics. (Prerequisites: 55-210, 55-211, 55-213.) (3 lecture, 3 laboratory hours a week) (Students cannot receive credit for both 55-440 and 55-340.)

55-341. Evolution
Topics include the interaction of gene mutation, selection, and population characteristics in the process of evolution, mechanisms of speciation, and current

problems in evolution. (Prerequisite: 55-211.) (3 lecture hours and 1 tutorial hour a week.)

55-342. Immunology
The formation and structure of antibodies, antigens and the mechanisms of antigen-antibody interactions. (Prerequisites: 55-140 and 55-141; corequisite; 59-230.) (2 lecture, 3 laboratory hours or equivalent a week.) (Students cannot receive credit for both 55-242 and 55-342.)

55-350. Molecular Cell Biology
An integration of recent findings in molecular and cell biology with those in genomics. The course emphasizes the general behaviour of biological macromolecules and energy transfer mechanisms, leading to in-depth review of the regulation of genome replication and recombination, gene transcription, protein translation, and epigenetic mechanisms governing gene regulation. This course is offered on-campus and as a distance course. (Prerequisites: 55-211 and 55-213, or 55-212 and 55-203 with appropriate laboratory experience and signature of instructor.) (3 lecture hours a week.)

55-351. Medical Microbiology
Viral and bacterial pathogenesis, including the processes and genetic control of human diseases. This course is offered on-campus and as a distance course (previously 55-241). (Antirequisite: 55-352; Prerequisite: 55-237 or 55-238.) (3 lecture hours a week.)

55-352. Medical Microbiology and Techniques
Viral and bacterial pathogenesis, including the processes and genetic control of human diseases. (Antirequisite: 55-351; prerequisite: 55-238.) (3 lecture, 3 laboratory hours a week including follow-up visits outside scheduled lab times.)

55-353. Advanced Cell Biology
This course will examine, at the molecular level, the basic working of a cell; dealing with several aspects of eukaryotic cell biology including intracellular transport, cell-to-cell communication and signal transduction, the cytoskeleton, cell growth and division, apoptosis, cell adhesion and cell migration. In addition to exploring the current state of the field, lecture material will highlight some of the critical experiments in diverse areas of molecular biology, genetics, biochemistry and cell imaging that have contributed to our current understanding. (Prerequisites: 55-211 and 55-213, or 55-212 and 55-203 with appropriate laboratory experience and permission of instructor.) (3 lecture hours a week.)

55-355. Embryology
Cellular, molecular, and biochemical mechanisms of gametogenesis, fertilization, cleavage, and organogenesis in a variety of animal systems. A major paper is required. (Prerequisites: 55-211, and 55-213.) (3 lecture hours a week.)

55-357. Animal Cells and Tissues
The structure and organization of animal systems at the tissue, cellular, and subcellular levels. Contemporary techniques, including electron microscopy, immunocytochemistry, and in situ hybridization are discussed. (Prerequisites: 55-211 and 55-213.) (2 lecture, 3 laboratory hours a week.)

55-359. Invertebrate Biology
Survey of major classes of the invertebrates from an evolutionary, phylogenic, and ecological perspective. Emphasis on the morphological, physiological, and behavioural adaptations that permit animals to exploit the full range of earth's habitats, including the living bodies of other organisms (parasitism). (Prerequisites: 55-210, 55-211, and 55-213.) (3 lecture, 3 laboratory hours a week.)

55-360. Ornithology
This course gives students a thorough understanding of the biology of birds, with an emphasis on avian ecology, evolution, and behaviour. This course complements Ecology, Evolution, Physiology, Animal Behaviour, and Conservation. Classroom lectures are integrated with laboratory exercises which provides students with hands-on exposure to the topics covered. Students will learn to identify the common birds in the Windsor area. All students are required to participate in a full-day laboratory at Point Pelee and Holiday Beach on a weekend in late September or early October. (Prerequisite: 55-210.) (3 lecture, 3 laboratory hours a week.)

55-368. Plant Ecology
Evolutionary and community aspects of plant interactions with other organisms and the physical environment. The course deals with plant demography at

different levels: individual, population, community, and ecosystem. (Prerequisite: 55-208 and 55-210.) (3 lecture, 3 laboratory hours a week.)

55-380. Biotechnology Laboratory
This intensive laboratory course will primarily simulate the discovery and rapid protein characterization of genes and gene products. Laboratory experiments will include cutting edge biotechnology techniques and traditional biochemical and molecular biology methodology. For example, DNA/plasmid isolation, cloning, DNA sequencing and analysis, introduction to bioinformatics and microarray technology, characterization of cloned products, protein isolation and characterization, and determination of enzymatic catalysis and regulation will be used to study this enzyme on a genetic and protein level. Other topics include forensic genetics and plant biotechnology. (Prerequisite: 55-213 and 59-261.) (1 tutorial/lecture hour and 6 laboratory hours per week over two terms, 6 credit course.) (Registration priority will be given to students for which this course is a program requirement.)

55-410. Speciation
The course will present an overview of current knowledge, controversy and research directions into the origin of species and will include topics such as species concepts, methods of studying speciation, tempo and modes of speciation, isolation mechanisms, reinforcement, and macroevolution. Background in basic Mendelian genetics, population genetics, evolution, ecology and biological diversity is required. (Prerequisite: 55-341) (2 lecture hours, 1 tutorial hour a week)

55-420. Undergraduate Research in Biology
Completion of an undergraduate research project, including an oral presentation at an annual colloquium and submission of written final report. (Registration and selection of supervisor will be completed with consent of the Department Head.) (10 laboratory hours a week; offered over two terms.) (A 6.00 credit hour research project which counts as two courses.)

55-423. Undergraduate Research in Biology
Completion of an undergraduate research project, including an oral presentation at an annual colloquium and submission of written final report. (Registration and selection of supervisor will be completed with consent of the Department Head.) (Restricted to students who have completed 55-420.) (10 laboratory hours a week; offered over two terms.) (A 6.00 credit hour research project which counts as two courses.)

55-426. Animal Communication
This course will cover mechanistic and evolutionary aspects of communication in vertebrates and invertebrates across four signaling modalities: visual, acoustic, chemical, and electrical. The first part of the course will review mechanisms of signal production, transmission through the environment, and perception by signal receivers for each signaling modality. The second part of the course will examine how natural and sexual selection shape the evolution of communication strategies in animals. The approach will be explicitly evolutionary, and will draw from a broad range of disciplines including physics, chemistry, ecology, psychology, and behavioural ecology. (Prerequisite: 55-210.) (3 lecture hours per week. 2 tutorial hours every other week.)

55-430. Pollution Ecology
The transport, fate and effects of pollutants in aquatic ecosystems; food web modelling in the context of pollutant fate; risk assessment. Topics will include toxicokinetics, toxicity testing, and measurements of pollutant stress. (Prerequisites: 55-210 and 55-213.) (3 lecture hours a week, 1 hour week tutorial.)

55-437. Conservation Biology
Principles of conservation biology emphasizing population and biogeographic attributes, including genetics, habitat fragmentation, and island processes, which characterize endangered species and habitats. Case studies of management of threatened species and habitats will be addressed. (Prerequisites: 55-210 and 55-211, or consent of instructor.) (3 lecture hours a week.)

55-444. Stream Ecology
Physical properties and biotic responses in rivers, including morphometry, energy processing, behavioural adaptations of organisms, and interactions among organisms. (Prerequisite: 55-210.) (3 lecture, 3 laboratory hours a week, and a field trip.)

55-445. Limnology

Selected aspects of the ecology of large water masses - large lakes and estuaries. Emphasis on physical properties and chemical dynamics of aquatic systems, and on life history requirements in such systems. (Prerequisite: 55-210 or 55-486.) (3 lecture hours a week.)

55-448. Neurophysiology
This course will examine the cellular, synaptic, and molecular processes responsible for the functions of the nervous system. Topics will include the generation, transmission, and integration of neural signals. The course will also discuss how functions of the brain in the processing of sensory information, controlling of movement, and generation of complex mental activity are dependent on neural signaling. Modern neurophysiological research methods and their applications in the study of brain function will be discussed. (Prerequisite: 55-258 or permission from the instructor.) (3 lecture hours a week.)

55-450. Evolutionary Endocrinology
This course will examine the molecular, cellular and organismal processes underlying the functioning of the major vertebrate endocrine systems. Topics will include overviews of the major vertebrate endocrine systems (e.g., reproductive, stress, metabolic, developmental etc.) by integrating recent medical-, field- and laboratory-based experimental research to explore the role of endocrine systems in our lives. The evolutionary role of hormones will be emphasized throughout as a means for medical health practitioners and environmental biologists to appreciate how and why complex endocrine systems are impacted by human-induced changes in the environment. (Prerequisite: 55-210 or consent of instructor) (3 lecture hours, 1 tutorial hour a week)

55-453. Biology of Cell Transformation
Molecular and cellular mechanisms of cell transformation and tumor development with emphasis on the role of oncogenes and environmental factors in cell transformation, and on the cellular and molecular biology of malignantly transformed (cancerous) cells, experimental analysis and applications. A major paper and/or seminar is required. (Prerequisites: 55-350 or 55-353, 59-230, 59-261, and consent of instructor.) (3 lecture hours).

55-454. Regenerative Biology and Disease
With the explosion of knowledge from molecular biology and the burgeoning interest in generating or regenerating tissues or organs through various bioengineering or stem cell approaches, this course will explore the phenomenon of regeneration and continual post-natal development from a broad biological perspective. This will involve analysing molecular pathways regulating stem cell differentiation, how specialized cells proliferate and undergo programmed cell death and how the architecture of tissues is preserved despite the constant replacement of old cells by new. We will also discuss how abrogation of these programs underlie a large number of developmental disorders. (Prerequisites: Any 2 courses chosen from 55-350, 55-353 or 55-355.) (3 lecture hours a week.)

55-455. Developmental Signaling and Developmental Genetics
Analysis at the molecular level of the activation and control of genes and proteins during oogenesis and early development in lower and higher eukaryotes. (Prerequisite: Any 2 courses chosen from 55-350, 55-353 or 55-355.) (3 lecture hours a week.)

55-458. Behavioural Neurobiology
This course will cover the structural, physiological, and biochemical mechanisms in the nervous system that are important for animal natural behaviours. In-depth case studies will be conducted to examine how animals have developed neural mechanisms for solving behavioural problems encountered in their environmental niches. Topics will be related to sensory processing, motor control, and learning and memory. Research methods used in the study of neural mechanisms of behaviour will also be discussed. (Prerequisite: 55-258) (3 lecture hours a week)

55-460. Molecular Biotechnology
Introduction to the techniques and applications of recombinant DNA technology and genetic engineering. Topics include the generation of transgenic organisms (microbes, plants, and animals) and their impact on agriculture and medicine. The social ramifications of these technologies will be discussed. (Prerequisites: 55-350 or 55-353.) (3 lecture hours a week.)

55-464. Plant Molecular Biology and Physiology
Plant development and its coordination by means of hormones and other molecular signals. Molecular approaches applied to the analysis and modification of plant development will be discussed. (Prerequisite: 55-213.) (2 lecture hours, 1

seminar hour a week.)

55-480 to 55-483. Special Topics in Biology
Selected topics of current interest which may vary from year to year.(May be repeated for credit if content changes.)
The University of Windsor is a member of the O*ntario Summer Field Courses Program.* Students may select and receive credit for one or more of over thirty field courses under the "Special Topics" designation. Courses are normally advertised in January. Because enrolment is limited, students should apply as early as possible. For further information, contact the Department.
Note: Special Topics in Biology: Epigenetics requires prerequisite: 55-350 or 55-353.

55-485. Excitable Cells
A systemic view of regulation in the nervous system. Physiological control mechanisms at the levels of molecules through cells, neural circuits and neural muscular regulation are discussed and investigated. (Prerequisites: 55-213 and 55-258.) (2 lecture, 3 laboratory hours a week.)

55-486. Great Lakes Field Biology
The physical, chemical, and biological properties of the Great Lakes system; measures of transport and fate of contaminants in aquatic systems and food webs; changes in species abundance, composition, and distributions. Field work stresses sampling techniques and measurements of temporal and spatial variation. Students are required to complete a project and present a seminar. (Antirequisite: 55-234; Prerequisites: 55-210 and 65-205, or consent of instructor.) (2 weeks, Intersession; 26 hours lecture, 52 hours field/laboratory work, 8 hours seminar.)

55-487. Field Course in Tropical Ecology
This two-week field course is a hands-on exploration of the flora and fauna of the tropics with an emphasis on ecology, behaviour, evolutionary adaptations, and community relationships. The course is normally held in Costa Rica but may occasionally be offered at other sites in the Neotropics. Field research will include identifying birds, mammals, reptiles, amphibians, insects, and plants; studying the ecology of neotropical animals in multiple ecosystems; capturing and banding birds; monitoring the social behaviour of monkeys; observing army ants, leaf-cutter ants, termites, ant/acacia mutualisms; and assessing different conservation practices. The course consists of field excursions, lectures, and data collection for independent projects. Project reports are submitted within one month of the completion of the course field component. The course will usually take place during the Winter Study Week and one week before or after. (Pre-requisite: 55-210 and permission of instructor)

55-492. Epigenetics
This course will examine our current understanding of “Epigenetics”, the study of heritable changes in gene expression that occur without a change in DNA sequence. Epigenetics is an area under intensive scientific investigation. The goal of the course is to provide an introduction to the fundamentals of epigenetic control along with an understanding of the interplay between epigenetics and disease, health, behaviour, and the environment. (Prerequisite: 55-350 or 55-353)

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ODETTE SCHOOL OF BUSINESS: COURSES

Non-Business Students:
Business courses are restricted to Business students only, with the following exceptions:

- All students must have successfully completed 75-100 before being allowed to register in any 200-level (or above) Business course~~s~~ unless specifically stated otherwise in the course description or with the permission of the Odette School of Business.
- Business courses listed as part of the Business Minor are open to all students, as long as the student has completed the associated prerequisite courses.
- Specific Business courses required as part of a non-Business program are open only to students registered in that program unless approved by the Odette School of Business.
- Non-specific Business courses required or allowed as part of a non-Business program are open only to students registered in that program unless approved by the Odette School of Business.
- In addition to specific course prerequisites, non-Business students must be in semester 3 or above before taking any 200-level Business courses, and are eligible to take 300 or 400-level Business courses only if they are in semester 5 or above, or unless specific arrangements have been made between the student's department and the Odette School of Business.
- Students registered in non-Business programs may have different course prerequisites or requirements as listed in the Business course descriptions. These students should consult with a Business School advisor before registering in Business courses.

Business Students
Students registered in a four-year Business program must have successfully completed 04-71-100 and 04-75-100 before being allowed to register in any 200-level (or above) Business courses.

- Before being allowed to take any 300-level Business courses, students registered in a four-year Business program must be in semester 4 or above, and have successfully completed all first-year core courses (41-110, 41-111, 62-194, 70-151, 71-100, 73-100, 73-202, 74-131 and 75-100)
- Before being allowed to take any 400-level Business courses, students registered in a four-year Business program must be in semester 5 or above, and have successfully completed all first and second-year core courses (41-110,41-111, 62-194, 70-151, 70-255, 71-100, 71-240, 71-243, 72-270, 72-271, 73-100, 73-202, 73-213, 73-220 and 74-131 and 75-100) before being allowed to take any 400-level Business courses
- Students registered in other than four year Business programs may have different course prerequisites or requirements. These students should consult with a Business School advisor before registering in Business courses.

Pursuant to a grading policy set by the Odette School of Business: all first and

second year Business courses will be graded to an average in the 60-70% range: all third year Business courses will be graded to an average of 65-75%; and, all fourth year Business courses will be graded to an average of 67-77%.

Courses below are listed according to the informal administrative units of the Faculty.

Not all courses listed will necessarily be offered in a particular term or year.

Special permission to enter courses without the stated prerequisites must be arranged with the Undergraduate Programs Office and the instructor involved.

Except as otherwise noted, there will be a minimum of thirty-six hours of class contact for all courses. All courses will be three hours a week unless otherwise indicated.

Under no circumstances will non-Business students be allowed to complete more than nine (9) Business courses.

The following course descriptions list only the most advanced prerequisites for that course. It is assumed that students have also successfully completed the requirements for these prerequisites. Courses considered to be equivalent to the listed prerequisites will satisfy the prerequisite requirements.

ACCOUNTING (70-)

70-151. Principles of Financial Accounting
An introduction to the theory and concepts of financial accounting including generally accepted accounting principles and issues as to classification, recognition, realization, measurement and reporting. The emphasis of the course is from the perspective of the user of accounting information, allowing the student to become familiar with the information available and its content value. (Prerequisites or corequisites: 41-110, 62-194 (or equivalent) and 75-100).

70-251. Intro to Financial Accounting Theory
This is the first of 3 courses of intermediate accounting that presents the current developments in the theory of generally accepted accounting principles and CICA (Canadian Institute of Chartered Accountants) standards are introduced. An in-depth, theoretical examination of the determination, measurement, classification and reporting of assets is presented. The conceptual framework of accounting is stressed.(Prerequisites: 70-151. Business students must also have completed 71-100).

70-252. Accounting Theory I
This is the second of three courses of intermediate accounting theory that provides an in-depth examination of the determination, measurement, classification and reporting of liabilities and owners' equity. Emphasis is given to the accounting use of the actuarial techniques in the accounting for bonds, pensions, and leases. Where applicable, the interpretation of accounting theory and concepts is presented for transaction analysis, measurement, and classification. The conceptual framework of accounting is stressed. (Prerequisite: 70-251. This course was formerly numbered 70-351. Although this course can be taken to upgrade grades in 70-351, students cannot receive credit for both 70-252 and 70-351.

70-255. Principles of Managerial Accounting
An introduction into management's use of internal accounting information for planning, managing, controlling and evaluation of business operations. Topics include cost concepts and costing techniques (including activity based costing), budgeting, cost-volume-profit analysis, standard costing, performance evaluation and product pricing. (Prerequisite 75-100, pre or co-requisite: 70-151). This course was formerly numbered 70-256. Although this course can be taken to upgrade grades in 70-256, students cannot receive credit for both 70-255 and 70-256.)

70-352. Accounting Theory II
This is the final course in the intermediate accounting theory sequence covering various special topics in financial accounting such as EPS, interperiod tax allocation, a rigorous study of accounting changes and error analysis and of the statement of cash flows, interim and segmented reporting. Financial statement analysis including business valuations will be covered, both from a quantitative

and qualitative viewpoint and the concept and techniques of earnings management are also explored. Cases are used to integrate theory and practice. The conceptual framework of accounting is stressed (Prerequisite: 70-252 (formerly 70-351) or consent of the instructor.)

70-356. Advanced Managerial Cost Accounting and Analysis
This course is designed to focus on the role and use of accounting information in management decision making, and for formulating policy and strategy. The application of some of the advanced techniques for planning, controlling and performance evaluation will be discussed. Behavioural and ethical issues will be considered. (Prerequisite: 70-255 with a minimum grade of 65%.) This course was formerly numbered 70-456. Although this course can be taken to upgrade grades in 70-456, students cannot receive credit for both 70-356 and 70-456.

70-358. Accounting Information Systems
The design and operation of manual and computerised accounting systems. The study of control environment, management and control of transactions and accounts, such as, accounts receivable, accounts payable and inventory. Emphasis will be given to the acquisition and input of information into accounting information systems; modes and methods of file structures and storage of accounting information; retrieval inquiry and report creation of information in files as well as financial statement preparation, analysis, and managerial decision making. Related issues such as audit trail, data retrieval, and data security will also be covered. (Prerequisite: 70-255 or 70-256 and 73-213.)

70-360. Auditing I
An introductory course designed to provide a broad foundation for all major aspects of auditing. This course focuses on objectives, concepts, standards, strategies, processes, and communications relating to external audits. Other services provided by public accountants and current developments affecting auditing and the auditing profession are considered. (Pre-requisite 70-251, Pre or co-requisite 70-358.)

70-361. Taxation I
This is the first of two courses designed to examine the Income Tax Act. This course focuses on the determination of residency and of income for tax purposes. Other tax related topics such as tax planning concepts, and concepts underlying the Act will be discussed. (Prerequisite: 70-251)

70-457. Advanced Accounting I
A study of concepts, standards and procedures underlying intercorporate investments including portfolio investments, investments involving significant influence, and investments involving control. The preparation of consolidated financial statements under a variety of circumstances is studied in detail. Other topical areas, such as foreign currency transactions and translation, governmental accounting and accounting for not-for-profit organisations will also be covered. (Prerequisite: 70-352.)

70-458. Advanced Accounting II
This course examines various theoretical perspectives in financial theory such as decision model approach, information economics, capital markets theory, agency theory, economic consequences, management incentives for financial reporting, earnings management, and accounting policy choice. Standard setting issues and other current and emerging issues in financial accounting theory and practice are discussed. Cases and readings are used to further integrate theory and practice and concepts from previous accounting courses. (Prerequisite or co-requisite 70-352) (Open to Business students only.)

70-459. Advanced Topics in Managerial Accounting
An elective advanced topics course that explores the different types of organizational controls. It focuses on the key decisions that must be made in using controls, such as choices of performance measures, performance standards and targets, and performance-based incentives. Limitations of traditional financial performance measures are discussed (e.g., their tendency to make managers excessively short-term oriented) and recently developed approaches to deal with these shortcomings are analyzed (e.g., EVA, Balanced Scorecard). The course is designed to develop skills that are desirable in managers, management consultants, compensation consultants, financial specialists, or human resource specialists. The course is taught by the case method of instruction. The cases allow for the exploration of the management control issues in a broad range of

settings such as start up firms, manufacturing firms, service organizations of different sizes. (Prerequisite: 4th year students only, or by permission of the instructor.)

70-460. Auditing II
This course is designed to provide an in-depth knowledge of the major aspects of auditing. It will examine topics such as audit sampling; public accountants' communications to users of accounting and non-accounting information; and emerging issues in auditing. (Prerequisites: 70-358 and 70-360.)

70-461. Taxation II
This course will focus on the computation of taxable income for individuals and corporations, and determination of tax. Tax planning techniques in business in a variety of situations will be discussed and other topics such as the Goods and Services Tax will also be considered. (Prerequisite: 70-361.)

70-462. EDP Auditing
This course is designed to focus on the integration of auditing concepts, standards and procedures in a computerized environment. It will examine EDP general and application controls, the similarities and differences between manual and EDP systems from the auditor's perspective, and will introduce computer-assisted audit techniques, and emerging technologies in EDP auditing. (Prerequisites: 70-358 and 70-360.)

70-491. Special Topics in Accounting
This is a seminar course covering major concepts or current problems or issues in the area of Accounting. The topic to be covered in a particular semester will vary and will be announced in the previous semester. Interested students should consult the Area Chair of Accounting. (May be taken for credit twice if content is different.) (Prerequisite: consent of the instructor.)

70-495. Independent Study in Accounting
This course must be taken under the direct supervision of an accounting faculty member. (May be taken for credit twice if content is different.) (Prerequisite: consent of the instructor and Area Chair.) This course was formerly numbered 70-452.

MANAGEMENT AND LABOUR STUDIES (71-)

71-100. Business Communications
Research has shown that effective communication skills are as necessary to career advancement as technical competence, work experience and academic qualifications. The importance of communication skills is not surprising when you consider that the average business manager spends 75-80% of the day communicating in one form or another. Thus, the focus of this course is to help you to sharpen your ability to communicate and manage conflict effectively - with individuals, within small groups, and with large audiences. This course stresses practical skill building for leaders. Time is spent on communication concepts and techniques, planning, organizing and making presentations, as well as the application of behavioural science theory to business communication and leadership. (Prerequisite or corequisite: 75-100) (Not open to non-Business students.)

71-240. Management and Organizational Life
This course provides an overview of the basics of management theory, coupled with a more applied view of how that theory may work in an organizational setting. It will build upon the understanding of strategic positioning and context provided by its new prerequisite Introduction to Business (75-100) where stakeholders, the environment, and business issues provide the background for understanding the challenges facing today’s manager. The course will provide some experiential opportunities to develop team and leadership skills, while looking at what affects the role of the individual and the group within the structure of the organization. An understanding of the influences upon and ways to motivate behaviour in organizations will be developed. (Prerequisite: 75-100. Business students must also have completed 71-100) This course was formerly numbered 71-340. Although this course can be taken to upgrade grades in 71-340, students cannot receive credit for both 71-240 and 71-340.

71-243. Human Resources Management

Human Resources Management (HRM) is concerned with the management of people at work - a key responsibility of people at work - a key responsibility of every manager within an organization. Topics include: integrating HRM decision making within a business strategy, recruiting and selecting qualified employees, developing and evaluating human resources and retaining and motivating employees through compensation systems, labour relations, and quality of work life initiatives. In recognition of the importance of the increasingly global context to Canadian organizations, the course incorporates a continuing international focus. (Prerequisite: 75-100. Business students must also have completed 71-100.)

71-300. Business Ethics in a Global Context
This required third year course examines ethical issues encountered in the management of business organizations operating domestically and globally. The course is designed to increase student awareness of the ethical dimension of business and to provide a decision making model for resolving ethical dilemmas encountered in business operations. The course begins with an examination of the basic philosophical perspectives on ethical behaviour and then focuses on issues such as discrimination and employee equity, environmental effects of business activities and advertising ethics. The overall goal of the course is to contribute to the development of the moral manager. (Prerequisites: 71-243.)

71-342. Compensation Management
This course is intended to give an understanding of the power of organizational rewards and managing this power for organizational effectiveness. This course entails an outline of the major concepts and principles of equitable reward design within organizations. Topics include the planning of salary and wages, pay equity, incentive pay, benefits, non-financial rewards, and the clarification of the linkages between rewards and desired behaviours. Special emphasis is given to reward system design and the evaluation of compensation program effectiveness. (Prerequisite: 71-243.)

71-344. Labour-Management Relations
A comprehensive introduction to the dynamic world of labour and management relations focusing on the unionized sector. The problems, issues, and challenges growing out of the labour-management relationship are examined against a broad background of information, including: the differences between union and non-union workplaces; the development and operation of labour unions; the impact of labour legislation; the negotiation and administration of collective agreements; and the resolution of industrial conflict. Given the size and importance of this unionized workforce in Canada, the knowledge and skills developed in this course have wide application. (Prerequisite: 71-243 or Semester 3 or above standing for students in the Labour Studies program.)

71-383. International Human Resources Management
The focus of this course is the management of people in the international context. Issues covered include culture, communication, and differences in the economic, social and legal environments as they affect people in organizations. Particular attention is paid to staffing, training, and compensating parent country nationals, host country nationals and third country nationals. (Prerequisites: 71-243)

71-441. Training and Development
This course has an experiential focus: student teams are responsible for developing and presenting their own training programs. The focus of this course is on the three major aspects of training and development efforts: (1) needs assessment, (2) program development, and (3) evaluation. Course topics include the design of training programs, adult learning models, development managerial skills, and the design of effective workshops. This course has an experiential focus; student teams are responsible for development and presenting their own training programs. (Prerequisite: 71-243.)

71-445. Organization Design
This course is designed to provide the student with an understanding of the importance of structure and processes in the analysis of modern complex organizations. It addresses how the internal structures should be changed, renewed, and adapted in view of external environmental threats and opportunities emanating from political, economic, social, legal, technological, and demographic changes. Topics include: organizational goals and effectiveness, structure and design, bureaucracy and life cycle, structural archetypes, information and control, power and politics, intergroup relations and conflict, structure-strategy relations and organizational renewal. This course utilizes the case method and

other applied problem-solving skills in analyzing and evaluating organizational structures and processes. (Prerequisite: 71-240.)

71-448. Labour Relations Law and Employment Legislation
Legislation, administrative agencies and courts play a significant role in shaping employer-employee relationships. this course aims to increase the knowledge and provide analytical skills to students who are interested in employment relationships in union and non-union workplaces. The course includes an analysis of labour relations law, employment standards law, the occupational health and safety law. Emphasis will be placed on Ontario laws. Lectures and case discussions will be used. (Prerequisite: 71-344.)

71-449. Negotiations
Various aspects of union-management negotiations in the private and public sector will be discussed. A key aspect of the course is a bargaining simulation played by students assuming the role of union and management negotiators. Grievance arbitration and other dispute settlement procedures will also be discussed. Students will learn negotiation and conflict resolution skills relating to the union-management relations. (Prerequisite: 71-243 or Semester 3 or above standing for students in the Labour Studies program.)

71-451. Organizational Staffing
At the heart of the organizational staffing process is the forming of matches between people and jobs that will result in an effective workforce for the organization. The course identifies the key influences upon, and components of staffing and overviews such support activities as job analysis, external and internal recruitment, selection and the assessment of staffing effectiveness. The course goes on to examine the deployment processes that represent the end pont of the person/job match. This match does may not be permanent, and so the course does go on to give consideration to equitable termination and outplacement practices which are required when people leave the organization. (Prerequisite: 71-243.)

71-452. The Management of Organization Health, Wellness and Safety
Health and safety plays a prominent role in the development of a strong organizational culture and a productive workforce. This course emphasizes the key goal of managers and HR professionals to create, develop and nurture a culture that is fully aware of the importance of safety and the advantages of a proactive employee wellness culture, and is willing to take the necessary steps to achieve it. Students will evaluate practices in the areas of health, safety, security and Workers' Compensation and the importance of due diligence and meeting safety legislation. An emphasis in the course is the adoption of proactive programs of employee wellness and assistance, careful medical and safety testing and the implementation of strategies to minimize compensation costs and maximize compliance with safety guidelines. (Prerequisite: 71-243.)

7**1-481. Diversity in the Workplace**
This course will address the knowledge and skills managers must develop in meeting the opportunities and challenges created by the diversity in the labour force. It will draw on the literature from a number of disciplines in focussing on interpersonal relationships as managers interact with and work with persons who are different from themselves. The human rights legislation will provide the framework for discussions on managing and valuing diversity in terms of gender, age, race, religion, ability and other groups. The course will use lectures and case discussions on the role of union and management in implementing equity in the workplace. (Prerequisite: 71-243 or Semester 3 or above standing for students in the Labour Studies program.)

71-485. Human Resources Planning
This course is concerned with planning of the human resources needs of organizations, focusing, in particular, on the role of the Human Resources Management function in this task. The objective is to provide an understanding of how the essential elements of the human resources planning process, in both unionized and non-unionized organizations, can be designed to match the wider organizational context. Topics include the assessment of human resources strategy and the application of planning principles to the different activity areas of human resources management, such as staffing, development and the management of diversity. An ongoing theme is the evaluation of how strategic human resources management contributes to organizational effectiveness. (Prerequisite: 71-344.)

71-491. Special Topics in Management and Labour Studies
This is a seminar course covering major concepts or current problems or issues in the area of Management and Labour Studies. The topic to be covered in a particular semester will vary and will be announced in the previous semester. Interested students should consult the Area Chair of Management and Labour Studies. (Prerequisite: consent of the instructor.) This course was formerly numbered 71-446. (May be taken twice for credit if content is different.)

71-495. Independent Study in Management and Labour Studies
The student, with the agreement of the instructor, will select, research and report on a topic. (Prerequisite: consent of the instructor and Area Chair). This course was formerly numbered 71-492. (May be taken for credit twice if content is different.)

FINANCE (72-)

72-270. Business Finance I
This course serves as an introduction to the area of business finance. The primary objective is to understand the fundamental concepts and principles of financial management of the business enterprise. After an introduction to the goal financial management, the course will cover the valuation of financial and real investments, risk and return, financial analysis, planning and control, and working capital management. (Prerequisites: 70-151, 62-194 or equivalent,73-100 and 75-100. Business students must also have completed 71-100.)

72-271. Business Finance II
This course focuses on long-term corporate financial decisions. The goal is to develop an understanding of the concepts and principles of the management of capital assets and resources. Topics include capital budgeting, cost of capital, capital structure, sources of long-term financing, and corporate risk management. International financial management will also be introduced. (Prerequisites: 73-202 (or equivalent) and 72-270.)

7**2-371. Intermediate Finance**
This is a recommended course for students wishing to continue in finance and compulsory for those aiming for a finance concentration. The course covers key topics in capital markets and corporate finance that lay the foundation for material to be covered in advanced finance courses. Areas covered include: fixed income markets and interest rate determination; raising funds in equity markets; the cost of capital; derivatives markets and applications to business finance; and the market for corporate control. (Prerequisite: 72-271.)

72-372. Investments
Appraising bonds, preferred, and common stocks as vehicles for investment. The course also involves the study of alternative investments, the market setting, technical analysis, and securities legislation in Canada. (Prerequisite: 72-271.) This course was formerly numbered 72-471. Although this course can be taken to upgrade grades in 72-471, students cannot receive credit for both 71-372 and 71-471.

72-373. Working Capital Management
A seminar in working capital management using case studies. Emphasis is placed on domestic and international cash management, control of accounts receivable, principles of inventory management, short and intermediate term financing. (Prerequisite: 72-271.)

72-378. Financial Markets and Institutions
A central theme of this course is the management of Canadian financial institutions through the analysis of their assets and liabilities. This course examines different types of risk exposures faced by these institutions. With real-world examples, this course will also address the current institutional issues in the context of domestic and international financial markets. (Pre-requisite or co-requisite: 72-371.). This course was formerly numbered 72-475. Although this course can be taken to upgrade grades in 72-475, students cannot receive credit for both 72-378 and 72-475.

72-379. International Financial Management
A study of international corporate financial management, international banking, and financial markets. Emphasis is placed on foreign exchange and exposure

management. The financial problems and risks faced by multinational corporations and banks are also discussed. (Co-requisite: 72-371.) This course was formerly numbered 72-476. Although this course can be taken to upgrade grades in 72-476, students cannot receive credit for both 72-379 and 72-476.

72-472. Portfolio Management
The shaping of portfolios to fulfill the needs of individuals and institutions including risk-return concepts, diversification, beta analysis, and market efficiency. (Prerequisite: 72-371.)

72-474. Corporate Financial Strategy
A seminar course in long-term financial management. Particular attention is directed toward long-term sources of funds, the firm's capital structure, and the cost of the various sources of long-term funds. Principles are illustrated by means of case studies. (Prerequisite: 72-371.) This course was formerly numbered 72-374. Although this course can be taken to upgrade grades in 72-374, students cannot receive credit for both 72-374 and 72-474.

72-477. Derivatives and Risk Management
An introduction to the use of options and futures with an emphasis on managing risk. Review of the markets and trading of equity and currency options; forwards and futures contracts; and options on futures. Principles of the valuation of options and futures. Application of hedging techniques under a variety of circumstances such as for personal investments, portfolio management, corporate risk management, foreign exchange risk management and agriculture. (Prerequisite: 72-371.)

72-478. Pension Finance and Management
The course provides an introduction to the principles of fiduciary management of pensions. Important concepts in pension finance such as asset liability management; tactical asset allocation; performance evaluation and risk management will be discussed. The course will also provide an overview of the management and regulatory framework of pensions in Ontario and Canada. (Prerequisite: 72-371.) This course was formerly numbered 72-375. Although this course can be taken to upgrade grades in 72-375, students cannot receive credit for both 72-375 and 72-478.

72-491. Special Topics in Finance
This is a seminar course covering major concepts or current problems or issues in the area of Finance. The topic to be covered in a particular semester will vary and will be announced in the previous semester. Interested students should consult the Area Chair of Finance. (May be taken for credit twice if content is different.) (Prerequisite: consent of the instructor.)

72-495. Independent Study in Finance
The student, with the agreement of the instructor, will select, research and report on a topic. (Prerequisite: consent of the instructor and Area Chair.) This course was formerly numbered 72-479. (May be taken twice for credit if content is different.)

MANAGEMENT SCIENCE (73-)

73-100. Introduction to Business Data Analysis using Spreadsheets
This course focuses on giving students the knowledge and skills to be used in a world in which spreadsheets are an integral part and which requires graduating business students to be proficient in its use. It also provides students with the knowledge and skills to be used in other courses in which spreadsheets' powers can play an important role in analyzing data and presenting information in a professional manner. This knowledge and skills include: effectively entering data on spreadsheets so that they can be efficiently manipulated and converted into relevant information, both numerical and graphical; and, creating and interpreting this relevant information in a professional manner. To accomplish this, students will learn how to create professional looking graphs and charts and how to use and apply various Excel functions and capabilities including pivot tables, filtering, sorting, merging, lookup formulas, conditional formulas, relative and absolute formulas, range labelling, descriptive statistics functions, probability functions and financial functions. (Prerequisites: 75-100 and 62-194)

73-202. Business Data Analysis
Statistical inference in a business environment. Topics include one population

inferences, two population inferences, analysis of variance, Chi-Square tests, linear regression and correlation. (Prerequisites: 75-100,73-100 and 62-194 (or equivalent). *This course was formerly numbered 73-102. Although this course can be taken to upgrade grades in 73-102, students cannot receive credit for both 73-202 and 73-102.)*

73-213. Introduction to Management Information Systems
This course provides an overview of Management Information Systems (MIS). Topics include: various types of MIS such as Information Reporting Systems, Decision Support Systems, and Office Automation Systems; introduction to hardware and software technology; personal, functional and enterprise information systems; and the value added to an organization by MIS.(Prerequisite: 75-100. Business students must also have completed 71-100.)

73-220. Quantitative Decision Models I
An introduction to the use of quantitative approaches to decision making. Topics include linear programming (model formulation and applications, computer solution, sensitivity analysis, and interpretation), transportation model, project management; PERT/CPM, inventory control. (Prerequisites: 73-202 (or equivalent), and 62-194 (or equivalent). Business students must also have completed 71-100.)

73-305. Statistical Quality Design and Control
The course discusses some of the important statistical concepts and methods for quality design and improvement. Topics include: statistical process control, development and interpretation of different kinds of control charts for variable and attribute data, designs of experiment for product/process improvement. A software package may be required to simulate the operation of an actual process, and to illustrate the methodology. (Prerequisites: 73-202 (or equivalent))

73-311. Introduction to Data Base Management
A study of the planning and design of data base systems in a business organization. Topics include: data concepts and modelling, data base planning, data structure and storage techniques, and data base design. A micro-computer-based data base software package will be used for regular assignments and team projects. (Prerequisite: 73-213.)

73-320. Quantitative Decision Models II
An introduction to the use of quantitative approaches to decision making under uncertainty. Topics include: inventory management under probabilistic demand, waiting line models or queues, computer simulation, decision analysis, multi-criteria decision making. (Prerequisite: 73-220.)

73-331. Operations Management I
An introduction to the problems and techniques encountered in the production of goods and services. Topics include: forecasting, capacity planning, facility location and layout, aggregate planning, inventories and materials requirement planning. (Prerequisite: 73-220.)

73-411. Business Process and Data Analytics
This course integrates the macro (processes) and micro (data analysis) view of businesses. The first half of this course focuses on the concept and evolution of business process management (BPM) and its impact on organizations. Topics will include how organizations benefit from BPM to enhance its competitiveness, sustainability, innovation and growth; techniques and evolution of process mapping; workflow management; and enterprise applications. The second half of this course focuses on the data underlying business processes. Topics will include data visualization and predictive modeling techniques using state-of-the-art data analysis software. (Prerequisites: 73-213, 73-311)

73-420. IT in Project Management
This course focuses on introducing students to the organizational, managerial, and technical constructs associated with IT project and program management. The nine PMI (Project Management Institute) specified knowledge areas of project management are explored, while introducing students to a wide array of tools and techniques that seasoned project managers use. Students are introduced to popular IT tools such as the MS Project (how it can help the managers manage projects) and the SAP Project Systems module (how it is integrated with Sales and Distribution, Materials Management, Financial Accounting, Controlling, and Human Capital Management other functions in the organization). (Prerequisites:

73-213 and 73-220)

73-431. Operations Management II
The course explores other substantive and analytical issues in the planning and control of operations and manufacturing. Topics include: operations scheduling, quality and assurance, reliability and maintainability; and recent advances in manufacturing technologies and control. Team or individual presentations on selected topics may be required. (Prerequisite: 73-331.)

73-491. Special Topics in Management Science
(May be taken for credit twice if content is different.) (Prerequisite: consent of the instructor.) This course was formerly numbered 73-425.

73-495. Independent Study in Management Science
(Prerequisite: consent of the instructor and Area Chair.) This course was formerly numbered 73-429. (May be taken for credit twice if content is different.) The student, with the agreement of the instructor, will select, research and report on a topic.

73-498. Modeling and Analysis in Management Science and Systems
This course is concerned with modelling, analysis and presentation of results using tools and techniques developed in the areas operations management, operations research, statistics and information systems. Problems are selected from case studies, simulation and real-life projects. A major part of the evaluation is based on team and individual reports and presentations. (Prerequisite: 73-331)

MARKETING (74-)

74-131. Principles of Marketing
An introduction to the principles, concepts and techniques of marketing. A significant objective of the course is the development of a basic understanding of the marketing process and its role in the organization, in the economy, and in global markets. This course was formerly numbered 74-231. Although this course can be taken to upgrade grades in 74-231, students cannot receive credit for both 74-131 and 74-231.

74-232. Marketing Problems-Applications and Decisions
The application of concepts and techniques in marketing through the use of cases and simulation gaming. The course will apply the concepts learned in 74-131, Principles of Marketing, in a managerial, decision-making format. (Prerequisites: 71-100 and 74-131 Pre or corequisite: 72-270.)

74-234. Consumer Behaviour
An analysis of consumer and buyer behaviour and their implications for marketing decisions. The course examines theories of, and research in, consumer behaviour through cases and group projects. (Prerequisite: 74-131.) This course was formerly numbered 74-334. Although this course can be taken to upgrade grades in 74-334, students cannot receive credit for both 74-234 and 74-334.

74-332. Research Methods in Marketing
The use of analytical methods to improve the efficiency of the marketing operations of companies and other organizations with emphasis on the development of a broad understanding of the uses and methods of research as applied to marketing. (Prerequisite: 73-202 and 74-131.)

74-335. Marketing Channels
The subject of marketing channels deals with the flow of ownership of a product from manufacturer to final user. Major topics include principles of marketing channel design, the types and roles of wholesalers and retailers, the impact of the other elements of the marketing mix, and issues in marketing channel management, such as power, conflict and legal concerns. (Prerequisite: 74-232).

74-337. Quantitative Analysis for Marketing Decisions
The application of quantitative techniques to marketing problems and strategy. (Prerequisite: 73-102 and 74-131.)

74-338. Retail Marketing Management
An introduction to retailing concepts and the examination of various managerial issues related to retailing, including retail marketing strategy formulation, customer

care and service, product assortments, retailer-supplier relations, pricing, inventory control, and location and layout decisions. (Prerequisite: 74-232.)

74-339. Logistics and Supply Chain Management
The planning, implementing and controlling of logistics activities associated with the flow of goods and related information, from the raw materials stage to the end user. This course discusses the fundamentals of business logistics and supply chain management, including transportation, order management, warehousing, reverse distribution, logistics information technology, and the impacts of product, price and promotion. (Prerequisite: 74-232).

74-432. Product Planning for Marketing Management
An overall view of the product planning function (including the planning of services) in a company or institution, including the development and appraisal of product ideas, optimal organization of the planning process, product audits, financial and legal aspects of product planning, and intra-organizational factors. (Prerequisite: 74-232.)

74-433. Internet Marketing
This course explores the impact of the Internet on traditional marketing strategy and actions. Specific emphasis will be placed on customer segmentation/targeting, consumer behaviour and issues of on-line/off-line consistency. Students will be expected to develop an understanding of web site design and basic html coding. Classes consist of lectures, lab work, case analysis, and student discussions/presentations. The course requires both qualitative and quantitative treatment of issues. (Prerequisites: 73-213 and 74-232.)

74-435. International Marketing
This course is concerned with the problems and opportunities of marketing in foreign environments. It will focus on the cultural, economic, and geographical problems encountered in managing the marketing function from a Canadian manager's perspective. (Prerequisite: 74-232.)

74-436. Advertising Management
A study of how to approach the management of advertising in business enterprises. The focus will be on making advertising decisions (*e.g.*, setting advertising objectives, creating advertising campaigns, developing media strategies, and measuring advertising results) in relation to the overall marketing strategy of the business or non-business enterprise. (Prerequisite: 74-232.)

74-437. Sales Management
The study of the personal selling area, including an examination of the role and responsibilities of the salesperson, the sales management, and sales management functions. (Prerequisite: 74-232.)

74-438. International Logistics
This is an applied course discussing the physical movement of products across international borders. The course examines the decisions that a logistics manager must make when shipping products internationally and the background knowledge that a logistics manager should possess to make these decisions. Topics include international ocean and international air transportation; customs duties; government influences on international logistics; international terms of carriage; and international cargo insurance and documentation. (Prerequisite: 74-232).

74-439. Marketing Strategy and Planning
An advanced course in the management of the marketing function. The course will include an appraisal of the key issues in the management of the marketing function with major emphasis on the development, formulation, implementation, and control of the firm's marketing plan. Emphasis will also be placed on current key issues in the marketing area and global marketing considerations. (Prerequisites: 74-232 and any 4 of 74-234, 74-332, 74-335, 74-337, 74-338, 74-339, 74-432, 74-433, 74-435, 74-436, 74-437, 74-491 and 74-495)

74-491. Special Topics in Marketing
This course examines major concepts, industries, ideas, issues or current problems in Marketing. Topics, and the method of delivery, may vary from semester to semester. Please contact the instructor for further information. (May be taken for credit twice if content is different.) (Prerequisite: Consent of instructor.)

74-495. Independent Study in Marketing
This course is of varying content dealing with topical issues in marketing. The course might focus on a specific functional area or a particular environment for the application of marketing concepts. Administration of the course will vary as appropriate with its content and might involve a literary survey, research project, experiential exercise, or other format. (Prerequisites: 74-232 and consent of the instructor and Area Chair.) This course was formerly numbered 74-431.(May be taken for credit twice if content is different.)

BUSINESS STRATEGY AND ENTREPRENEURSHIP (75-)

75-100. Introduction to Business
This course takes a holistic approach in helping students develop an understanding of their future places, as entry-level managers, in business and other forms of organizations. Functional business learning is undertaken using the lecture method. In parallel, the basic elements of strategic management are introduced in order to develop students' strategic thinking capabilities. Project work focuses on adapting students' career strategies to the employment environment, and on adapting companies' strategies to their competitive environments. Finally, the case method is used to emphasize ethical self-management, group dynamics and organizational governance, and entrepreneurial processes involved in starting and managing a small business. The course demands that students: use their initiative; develop their analytical, decision-making and interpersonal management skills; and take responsibility for achieving success. (Credit cannot be obtained for both 75-100 and 71-140).

75-205. Co-op Work Term I
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.) (Credit cannot be obtained for both 75-205 and 75-401). This course was formerly numbered 75-401.

75-290. Fundamentals of Entrepreneurship
This is a survey course designed to introduce students from all faculties to entrepreneurship as a career option. The entrepreneurial process will be explored through a mix of lectures and case studies. Topics include the identification of profitable business ideas, assessment of business opportunities, entry strategies, marshalling resources, and the start-up process. (Prerequisite: 75-100. Business students must also have completed 71-100.)

75-305. Co-op Work Term II
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.)(Credit cannot be obtained for both 75-305 and 75-402). This course was formerly numbered 75-402.

75-390. Entrepreneurial Resource Management
This course covers the strategic issues involved in attracting and managing resources - financial, human, and intellectual capital - in the entrepreneurial firm. The course is taught from two distinct perspectives-- from the point of the view of the resource provider (angel investor, venture capitalist, bank, corporation, talent) and from the point of view of the resource seeker (the entrepreneur). The course focuses on the strategic implications, rather than financial techniques, associated with both attracting resources and valuing new and growing ventures. The course is suitable for any student wishing to pursue an entrepreneurial career path, including a career in venture capital. Pre-requisites: 72-271 (Business Finance II) and 74-131 (Principles of Marketing).

75-391. New Venture Formation
Designed for students who choose entrepreneurship as a career option, this

course is an in-depth study of the process of drawing the blueprints for a new enterprise including: developing business ideas, developing business concepts, conducting feasibility studies, choosing a legal form or business, writing business plans, identifying and approaching sources of money, raising funds, and putting together a package of resources to start an enterprise. (Prerequisites: 72-271 and 74-131.)

75-393. International Business
This course is designed to provide students with the tools to think globally and manage internationally. This survey course covers a wide range of topics including, the global trade and investment environment, the international firm's cultural, political, and competitive environment, and the management and operations of international firms. The focus throughout the course is on the changes that occur when a firm moves from a domestic focus to a global one. (Prerequisites: 72-271 and 74-131.)

75-397. The Law and Business Administration
A survey of the law pertaining to business administration. Topics include: the legal approach to business problems, contracts, sale of goods, bills of exchange, agency, bailment, real property, partnerships, corporations, and bankruptcy. (Prerequisite: 71-243.)

75-405. Co-op Work Term III
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.) (Credit cannot be obtained for both 75-405 and 75-403). This course was formerly numbered 75-403.

75-490. Strategy in the Global Business Environment
This course builds on the basic knowledge provided in 75-393 to provide students with an in-depth appreciation of global management issues. The course focuses on developing and implementing global strategies. This includes a detailed analysis of the international environment and the forces that determine global effectiveness, as well as consideration of different forms of entry available to firms and the specific factors that must be addressed to implement global strategies successfully. (Prerequisite: 75-393.)

75-491. Special Topics in Strategic Management and Entrepreneurship
This is an advanced course designed to examine, in-depth, the strategic issues facing business decision makers. Coverage will vary to reflect the contemporary issues and concerns of today's executives. (May be taken for credit twice if content is different.) (Prerequisite: fourth year standing and consent of the instructor.)

75-493. Field Study in Strategic Management and Entrepreneurship
In this course, teams of students study an actual firm focusing on identifying the strategic issues facing the firm, the needed strategic plans for addressing them, and the implementation of such plans. Students pursuing the entrepreneurial option can also take this course to finalize the prototype for the business they intend to start. (Prerequisite: Semester 7 or Semester 8 standing.)

75-495. Independent Study in Strategic Management and Entrepreneurship
Under faculty supervision, students undertake an individualized program of independent study to pursue, in great depth, a topic in strategic management or entrepreneurship where they can apply the knowledge gained in prior courses. (Prerequisite: consent of instructor and Area Chair.) (This course was formerly numbered 75-494.)(May be taken for credit twice if content is different.)

75-496. Enterprise Development Consulting
Students will perform business consulting and market research for local organizations, giving them opportunities to network while applying skills and knowledge learned in the classroom to real life business situations. Semester-long projects covering different business areas are performed in small supervised teams. Weekly class time is a round-table discussion format used for collaboration of ideas and strategy with the rest of the class. Students will be evaluated on

participation along with formal reports and presentations regarding the projects. Highly motivated students from a variety of business-related disciplines will make-up the consulting team. (Prerequisites: Approval of instructor.) (Open to Semester 7 and above students only).

75-498. Strategic Management
Taught from the perspective of the CEO, this is the capstone course of the B.Comm. Program. It is designed to integrate the knowledge gained in all business courses and focus such knowledge on the central task of managing the firm in its entirety. (Prerequisites: All other required Business courses and Semester 7 or 8 standing for B. Comm. students, or Semester 5 or 6 standing for B. Comm. for University Graduates students.) (Not open to non-Business students.)

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CHEMISTRY AND BIOCHEMISTRY: COURSES

All courses listed will not necessarily be offered each year.

The prerequisite of all 200-level courses, unless otherwise indicated, will be both 59-140 and 59-141.

The prerequisite for all 400-level courses will be the consent of the instructor, except as noted.

59-100 Introduction to Chemistry
This course stresses fundamental principles of chemistry, and is intended for students lacking SCH4U or equivalent, or requiring additional preparation for 59-140 (General Chemistry I), 59-110 (Topics in General Chemistry) and 59-191 (Organic and Biological Chemistry for Health Sciences) . Topics include: basic atomic theory, the periodic table, stoichiometry, properties of gases and liquids, acid-base concepts and chemical equilibria, organic and polymer chemistry. This course can serve as a prerequisite for 59-140, but may not be taken for credit in any Science program. (4 lecture hours and 2 tutorial hours per week; or 3 lecture hours and 1 tutorial hour) (Students who first completed 59-140 may not subsequently enrol in 59-100.)

59-110. Topics In General Chemistry
An introduction to selected topics in modern chemistry for engineering: atomic and molecular structure, properties of matter and the periodic table, macroscopic chemical systems, stoichiometry, properties of the equilibrium state and applications to thermochemistry and electrochemistry. (Prerequisite: Grade 12“U” Chemistry or equivalent.) (3 lecture, 3 laboratory hours a week.)

59-140. General Chemistry I
Introductory concepts in chemistry, including reactions of atoms, ions, and molecules, solution stoichiometry, thermochemistry, electronic structure of atoms, basic chemical bonding and molecular geometry, periodic properties of the elements, and the theory of gases. (Prerequisite: Grade 12“U” Chemistry or equivalent (59-100), or consent of the instructor.) (3 lecture, 3 laboratory/tutorial hours a week.)

59-141. General Chemistry II
A continuation of 59-140 covering topics such as chemical kinetics, general equilibrium theory, acid-base theory, chemical thermodynamics, and introduction to organic chemistry. (Prerequisite: 59-140.) (3 lecture, 3 laboratory/tutorial hours a week.)

59-191. Organic and Biological Chemistry for Health Sciences
A course primarily intended for students in the Collaborative Four-Year B.Sc.N Program. The subject matter includes a survey of organic functional groups, the organic chemistry of biomolecules, and a survey of the major metabolic pathways. (Prerequisite: Grade 12“U” Chemistry or equivalent.) (Not open to students in any Science program. May not be used for credit in any Science program.) (2 lecture hours, 1 tutorial hour a week.)

59-201. Chemistry in the Marketplace
The basic notions of chemistry will be introduced and discussed in a qualitative manner with a view to understanding chemistry and materials encountered in everyday life. The course will provide an appreciation for the ubiquitous nature and importance of chemicals and chemical processes. Discussion will include a variety of topics such as chemistry in the home, plastics, drugs, cosmetics, biotechnology, chemistry and computer technology, nuclear power and pollution. The course is intended for students with no formal background in chemistry. (Not open to first-year students or students in any Science program. May not be used for credit in any Science program.) (2 lecture hours a week.)

59-230. Introductory Organic Chemistry
Introduction to organic chemistry, with emphasis on structure, stereochemistry, and reactions of aliphatic and alicyclic compounds and their functionalized derivatives. (Prerequisites: 59-140 and 59-141, or 59-110.) (Antirequisite: 59-232.) (3 lecture, 3 laboratory hours a week.)

59-232. Introductory Organic Chemistry

The same as 59-230 but without the laboratory. (Prerequisites: 59-140 and 59-141.) (Antirequisite: 59-230.) (3 lecture hours a week.) (Not available for credit to students majoring in Chemistry, Biochemistry, or Biological Sciences or students minoring in Chemistry or Biochemistry.)

59-235. Introductory Organic Chemistry II
A continuation of 59-230. Topics include the chemistry of nitrogen-containing compounds, aromatic chemistry and an introduction to spectroscopic methods. (Prerequisite: 59-230.) (2 lecture hours a week.)

59-240. Introductory Physical Chemistry I
Properties of ideal and real gases, first and second laws of thermodynamics, physical transformations of substances, mixtures of substances and phase diagrams are applied to changes of state, chemical reactions and spontaneous processes. (Prerequisites: 59-141, 62-139 or 62-140, and 62-141.) (3 lecture, 3 lab or 1.5 tutorial hours in alternate weeks.)

59-241. Introductory Physical Chemistry II
Physical and chemical equilibrium, equilibrium electrochemistry, molecular motion and collisions, chemical reaction rates, kinetics and introduction to statistical mechanics. (Prerequisite: 59-240) (3 lecture, 3 laboratory hours per week.)

59-250. Introductory Inorganic Chemistry I
Introduction to inorganic chemistry. Topics include: the origin of trends in the periodic table, molecular symmetry, and chemical bonding (including ionic bonding and the molecular orbital and valence bond models for covalent bonding). These approaches will be used to explain the chemistry and properties of selected classes of main group compounds. Photoelectron, NMR, and vibrational spectroscopy are introduced as complementary tools in the examination of these molecular species. (Prerequisite: 59-141.) (3 lecture hours a week, 1.5 tutorial hours a week.)

59-251. Introductory Inorganic Chemistry II
The coordination chemistry of transition metals will be discussed, with particular reference to the means of physical and spectroscopic characterization. Relevance of such compounds to bio-inorganic systems will also be discussed. (Prerequisite: 59-250.) (3 lecture, 3 laboratory hours a week.)

59-261. Organic Chemistry of Biomolecules
An extension of the principles covered in 59-230 to the structure and properties of organic molecules of biological significance (*i.e.,* proteins, nucleic acids and lipids). (Prerequisite: *59-230.*) (3 lecture, 3 laboratory hours a week.)

59-263. Organic Chemistry of Biomolecules
The same as 59-261 but without the laboratory. (Prerequisite: 59-230 or 59-232 or consent of the department.) (3 lecture hours a week.) (Not available for credit to students majoring in Chemistry, Biochemistry, Biochemistry-Biotechnology, Biology-Biotechnology or Biological Sciences or students minoring in Chemistry or Biochemistry.) (59-263 may not be used as a pre-requisite for 59-362, 59-363, 59-365 or 59-380 nor as one of the eight additional Science courses at the 200 level or above for students majoring in General Science)

59-320. Analytical Chemistry
Fundamental chemical principles and theory that are important to classical, or "wet" analytical chemistry are presented, and illustrated using practical applications. The topics covered in this course include aqueous-solution chemistry, equilibria in complex systems, electrolytes, and titrimetric methods of analysis (gravimetric, precipitation, acid-base, complexiometric and reduction-oxidation). Theory and applications of electrochemical techniques include potentiometric and amperometric titrations. (Prerequisite: 59-141 or consent of instructor.) (3 lecture hours, 3 laboratory hours a week.)

59-321. Principles of Instrumental Analysis
The fundamental principles of operation and practical application of modern analytical instrumentation are presented. Acquisition of qualitative and quantitative chemical, biochemical and bioanalytical data from these instruments and methods describes the atomic and molecular composition and structure of matter. Topics covered in this course include atomic and molecular absorption and emission (photoluminescence) spectroscopy, atomic and molecular mass spectroscopy, and separation methods such as gas and liquid chromatography and capillary electrophoresis. (Prerequisite: 59-320 or consent of instructor.) (3 lecture, 3 laboratory hours a week.)

59-330. Spectroscopic Structure Identification
Structure elucidation and the use of spectroscopic techniques in synthetic chemistry. The experimental and theoretical principles of mass spectrometry, UV/visible, infrared and nuclear magnetic resonance spectroscopy, with focus on applications of spectroscopic techniques to structure analysis. (Prerequisite: 59-235 or consent of instructor.) (3 lecture, 3 laboratory hours a week.)

59-331. Intermediate Organic Chemistry
The methods of organic synthesis and the reaction mechanisms involved. (Prerequisite: 59-235 or consent of instructor.) (3 lecture, 3 laboratory hours a week.)

59-332. Spectroscopic Structure Identification
The same as 59-330 but without the laboratory. Not available for credit to students minoring in Chemistry or Biochemistry.(Prerequisite: 59-235 or consent of instructor.) (3 lecture hours a week.)

59-333. Intermediate Organic Chemistry
The same as 59-331 but without the laboratory. Not available for credit to students minoring in Chemistry or Biochemistry.(Prerequisite: 59-235 or consent of instructor.) (3 lecture hours a week.)

59-340. Quantum Chemistry
Principles of quantum theory, origins of quantum mechanics, wave-particle duality, Schroedinger equation, Born interpretation of the wavefunction, the uncertainty principle, applications of quantum mechanics, atomic structure and spectra, molecular structure, molecular orbital theory, introduction to computational chemistry. (Prerequisite: 59-241.) (3 lecture, 3 laboratory hours per week.)

59-341. Molecular Spectroscopy
Symmetry elements, group theory, character tables, rotational and vibrational spectroscopy, electronic transitions, lasers, photoelectron spectroscopy, introduction to nuclear magnetic resonance, electron spin resonance. (Prerequisite: 59-340 or consent of instructor.) (3 lecture, 3 laboratory hours per week.)

59-350. Organometallic Chemistry
This course provides an introduction to the organometallic chemistry of the transition metals. (Prerequisite: 59-251 or consent of instructor.) (3 lecture, 3 laboratory hours a week.)

59-351. Materials Chemistry
Modern topics in materials science and solid state chemistry are discussed with an emphasis on properties, applications, and methods of characterization. The areas covered will include biometric materials, nanoscale engineering, liquid crystals, semiconductors, superconductors, organic metals, ferromagnetism and the ferroelectric effect, non-linear optical materials, thermochromic solids, scanning tunneling microscopy, and atomic force microscopy. Emphasis on applications to biomaterials engineering. (Prerequisite: 59-251.) (3 lecture hours a week.)

59-352. Organometallic Chemistry
The same as 59-350 but without the laboratory. Not available for credit to students minoring in Chemistry or Biochemistry. (Prerequisite: 59-251 and consent of instructor.) (3 lecture hours a week.)

59-362. Metabolism I
Catabolism and the generation of phosphate bond energy. Introduction to chemistry of life, principles of bioenergetics, glycolysis, glycogen breakdown, citric acid cycle, electron transport/oxidative phosphorylation, pentose phosphate pathway, fatty acid oxidation - ketone bodies, amino acid degradation energy metabolism. (Prerequisite: 59-261.) (3 lecture hours a week.)

59-363. Metabolism II
The utilization of phosphate bond energy will be illustrated by carbohydrate, fatty acid, nucleotide and lipid biosynthesis, hormonal (G-proteins) and metabolite regulation, biological membranes (structure and transport mechanisms) and contractile processes (muscle biochemistry). (Prerequisite: 59-362.) (2 lecture hours a week.)

59-365. Protein and Nucleic Acid Chemistry
The covalent and three dimensional structures of these macromolecules will be described in conjunction with study of the chemical and physical methods used in their purification and characterization. (Prerequisite: 59-261.) (2 lecture hours a

week.)

59-380. Biotechnology Laboratory
This intensive laboratory course will primarily simulate the discovery and rapid characterization of genes and gene products. Laboratory experiments will include cutting edge biotechnology techniques and traditional biochemical and molecular biology methodology. For example, DNA/plasmid isolation, cloning, DNA sequencing and analysis, introduction to bioinformatics and microarray technology, characterization of cloned products, protein isolation and characterization, and determination of enzymatic catalysis and regulation will be used to study gene products on a genetic and protein level. Other topics include forensic genetics and plant biotechnology. (Prerequisites: 59-261 and 55-213, Recommended co-requisites: 59-362, 59-363, and 59-365.) (6 laboratory hours per week over two terms, 6 credit course.)

59-391. Pharmacology for Health Sciences
A lecture course of particular interest to students in the health sciences areas. The course material includes the principles of pharmacokinetics and pharmacodynamics, and is aimed at developing an understanding of the function of the human body with respect to the use and effects of drugs in health and disease. (Prerequisites: 55-204, 55-205, and one of 59-261 or 59-263.) (Anti-requisite: 59-291) (3 lecture hours a week).

59-410. Research
Original laboratory research under the direction of a faculty member. Student must present three seminars discussing their research project. (1 lecture, 12 laboratory hours per week over two terms; 6 credit hours.) (Only open to students in Chemistry Honours, Chemistry and Physics Honours, Biochemistry Honours; please consult the "Program Requirements" section above.) (Prerequisites: major average of 72% and a cumulative average of 72%.)

59-431. Special Topics in Organic Chemistry
Topics may include polymer chemistry, natural product chemistry, advanced synthetic methodology, or design and execution of organic syntheses. (Prerequisite: 59-331 or consent of instructor.) (2 lecture hours a week.) (May be repeated for credit if content changes.)

59-435. Advanced Organic Chemistry
Physical organic chemistry. Includes molecular orbital theory, stereochemistry, thermodynamics, and reaction mechanisms. (Prerequisite: 59-331 or consent of instructor.) (2 lecture hours a week.)

59-440. Kinetics and Photochemistry
Fundamentals of kinetics and photochemistry. Absorption and emission techniques. Surface photochemistry. (2 lecture hours a week.)

59-441. Statistical Thermodynamics
This course covers the following topics: laws of thermodynamics, heat capacities, distribution laws, partition functions, and chemical equilibria and kinetics. The subject will be further illuminated by discussions of low temperature phenomena and spectroscopy. (Prerequisite: 59-241.) (3 lecture hours a week.)

59-445. Advanced Physical Chemistry
Special topics in physical chemistry. (2 lecture hours a week.)

59-450. Special Topics in Main Group Chemistry
This course provides an introduction to the chemistry of main group elements with a particular focus on the elements of the p-block. The material will highlight the similarities and differences observed between organic molecules and those from the rest of the periodic table with respect to their structural features, bonding and reactivity. (Prerequisite: 59-250.) (3 lecture hours a week.)(May be repeated for credit if content changes.)

59-451. Special Topics in Inorganic Chemistry
Advanced topics in inorganic chemistry, bioinorganic chemistry and organometallic chemistry may include analytical and spectroscopic methods of use to the inorganic chemist, advanced topics in main group chemistry, coordination chemistry, organometallic chemistry, free radical chemistry or the chemistry of the lanthanides and actinides. (Prerequisite: 59-351 or Consent of instructor.) (2 lecture hours a week.) (May be repeated for credit if content changes.)

59-452. Surface Chemistry and Analysis
This course provides an introduction to the properties of surfaces with a focus on

the formation, characterization and applications of self-assembled monolayers. Specific topics will include methods of preparation, molecular-level control of macroscopic surface properties, chemical reactions on the monolayer surface, and surface characterization techniques. The course will also cover applications of self-assembled monolayers such as their use as etch resists, as substrates for crystallization, and as model biological surfaces. (Prerequisite: 59-350.) (3 lecture hours per week.)

59-469. Lipids, Lipoproteins, and Signaling
Biochemistry and cell biology of lipids and their role in cellular signaling, with a special emphasis on the experimental basis of current knowledge. Topics covered include lipid and membrane biochemistry, lipoprotein structure and metabolism, small molecules such as steroids and leukotrienes, and an integrative assessment of the role of lipids in cellular processes such as protein trafficking and intracellular signaling. (Prerequisites:59-363 and 59-365 or permission of the instructor.)

59-464. Enzymology and Biotechnology
This course will focus on the structural and mechanistic properties of biological enzymes. Topics to be covered include, chemical catalysis, kinetics, activity inhibition, catalytic mechanisms, and an overview of modern approaches to studying enzymes. Molecular mechanisms regulating the activities of enzymes in the cell will be discussed. (Prerequisite: 59-261.) (2 lecture hours per week.)

59-466. Drug Design
Lectures cover various aspects of drug discoveries and designs. Beginning with basic knowledge in pharmacokinetics and pharmacodynamics, students should learn how lead is discovered and how the lead is modified to yield potent therapeutic agents. Several techniques in the area of molecular biology, biochemistry, organic chemistry and computational biology will be discussed and presented. (Prerequisite: 59-391.) (3 lecture hours per week.)

59-468. DNA Science and Diagnostics
The focus of this course is DNA science and the application of DNA technology in the understanding and diagnosis of human disease. The lectures cover the biochemistry and expression of DNA and RNA at the molecular level, the theory and practice of recombinant DNA technology, and the application of DNA probes in diagnosis of human disease and in human gene therapies. (Prerequisite: 59-391.) (2 lecture hours with one hour of computer lab or tutorial session per week.)

59-476. Special Topics in Chemistry
(2 lecture hours a week.) (May be repeated for credit if content changes.)

59-480. Bioinformatics/Genomics/Proteomics
Introduction to informatics, flow of genetic information from nucleic acid sequence to amino acid sequence, gene expression profiling at the mRNA level, gene micro arrays, application of genomic database (Swissprot, gene bank). Introduction to functional genomics, proteomics, protein profiling, 2D gel electrophoresis, mass spectrometry of proteins eluted from 2D gels, peptide mass fingerprinting, comparative proteome analysis, application of 2D protein database and MS peptide database, high throughput analysis of protein-protein interactions, antibodies and phage-display technologies for protein micro array analysis, application of the biomolecular interaction network database (BIND) to find and predict protein-protein interactions. (Prerequisite: 59-365 or 55-350.) (2 lecture hours and 1.5 computer lab hour per week.)

Fall 2015 Undergraduate Calendar

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LANGUAGES, LITERATURES AND CULTURES/LANGUES, LITTÉRATURES ET CULTURES (LLC): COURSES

JEWISH STUDIES

06-110. Hebrew for Beginners I
A brief introduction to the Semitic languages of which Hebrew is a prominent member, including a survey of the main epochs of the Hebrew language such as Biblical Hebrew, the Hebrew of medieval Spain, the renaissance of Hebrew in the 19th century and modern Hebrew. Elements of the language to be covered include the printed alphabet, the roots of Hebrew words, basic vocabulary and the structures of sentences. Assignments will include writing basic words and reading elementary texts. No previous knowledge of Hebrew is required.

06-111. Hebrew for Beginners II
This course is a continuation of 06-110. Included are additional roots of Hebrew words, increased vocabulary including the tenses of words, more complex sentence structures, reading more advanced texts and writing basic sentences. (prerequisite: 06-110)

06-120. Introduction to Jewish Civilization
This course will introduce basic Jewish thought and practices focussing on Jewish religious and cultural traditions from its earliest beginnings through the dramatic events of the last century. The course will examine Jewish perspectives on God, Torah, prayer, the afterlife, the Jewish life cycle, the holiday cycle of the Jewish year and Jewish identity.

06-170. Introduction to Diaspora Studies: There's No Place Like Home
This course introduces students to diasporas-scattered populations living in exile from their ancestral homelands. The course focuses on the significance of migration, exile, belonging, and nostalgia (for ancestral homelands) for diasporas throughout the world. Students submit projects (incorporating oral histories, for example) on the diaspora of their choice. (Also offered as Diaspora Studies 35-170 and Political Science 45-170)

06-220. Jewish Mysticism
The purpose of this course is to understand Jewish spirituality and mystical experience through various mystical traditions including Spanish Kabbalah, Lurianic Kabbalah, the Sabbatean heresy and Polish Hasidism.

06-230. Hebrew Bible: Text and Meaning
Because of the centrality of the Bible to Jewish thought, it has been the subject of many important commentaries by Rabbis over the centuries. These commentaries, known in Hebrew as Midrash, attempt to understand not only the literal meaning of the text but also to understand its deeper meaning in terms of morals and values, mystical insights and allegorical interpretations. Disciplines such as psychology, archaeology, literary analysis and anthropology are used to gain a better understanding of the text.

06-235. To Auschwitz and Beyond: Reflections on the Meaning of the Holocaust
An examination of responses to key issues raised by the Holocaust as reflected in postwar culture both in Canada and abroad.

06-270 The Jewish Diaspora: Ancient to Modern
This course will acquaint students with the Jewish Diaspora over the centuries. The existence of the Jewish people as a dispersed people is central to understanding their diversity, shared identity and aspirations. Various major migrations and individual Jewish communities will be examined. (Also offered as Diaspora Studies 35-270)

06-370. Jews and the Modern World
This course will examine Judaism through the prism of modern intellectual and social movements which Jews have embraced and of which they often have been leaders. These include liberalism, socialism, capitalism, feminism and Zionism. Jewish contributions to the rise of the social sciences also will be examined.

ARABIC STUDIES

08-110. Introduction to Arabic I
Introduces vocabulary and the basic elements of Arabic language structure. Students will acquire a basic level of expertise in the four communication skills: listening, speaking, reading and writing. (Only for students with no prior knowledge of Arabic. Students may not obtain credit for this course and the former 07-110)

08-111. Introduction to Arabic II
This course is the continuation of “Introduction to Arabic I”. It is designed to increase vocabulary, enhance knowledge of the elements of Arabic language structure and provide additional oral (listening and speaking) and written (reading and writing) communication skills. (Prerequisite: 08-110 or the former 07-110 , or permission of instructor. Students may not obtain credit for this course and the former 07-111)

08-210. Intermediate Arabic I
The course targets the four basic language skills of modern standard Arabic: listening, speaking, reading, and writing. Reading and writing assignments in this class will expose students to a large variety of vocabulary and topics in religion, culture, and politics. Students are expected to read, to report on written material in Arabic (newspapers, comics, magazines), and to listen to Arabic news and songs. The ultimate objective of the course is to help them to acquire and to apply language tasks such as paraphrasing and summarizing short texts, communicating their points of view in writing and speaking, as well as describing and narrating events**.** (Prerequisite: 08-110 and 08-111, or permission of instructor.)

08-211. Intermediate Arabic II
This course will serve as a continuation of Intermediate Arabic I with equal emphasis on speaking, reading, oral and aural skills. The course will cover advanced aspects of grammar and structure of modern written Arabic. Selected readings from contemporary Arabic culture and politics will be introduced into the curriculum and will serve as basis for reading and conversation. (Prerequisite: 08-210, or permission of instructor.)

08-261.Introduction to Arabic Culture
An interdisciplinary cultural studies course surveying the complex history that has shaped Arabic culture and the major forces that continue to effect changes in Arabic culture. (The course is offered in English.)

08-262. Modern Arabic Literature
A survey of modern Arabic literature (in English translation). Selected texts are studied as literature with constant reference to the social, cultural and political contexts in which they were written. Students are introduced to the major modern Arabic genres and discursive practices, with particular emphasis on poetry and fiction, as well as major Arabic literary and intellectual figures. (The course is offered in English.)

08-361. Literature and Film in North Africa and the Middle East
This course introduces students to North African and Middle Eastern film and literature as interrelated activities involved in the process of cultural production and consumption. It offers a structured elaboration of the social, political and cultural context in which Arabic cinema and literature have evolved and provides students with a critical introduction to the language of film and literary and cultural criticism.

08-362. Modern Arabic Poetry in Translation
This course will introduce students to modern Arabic poetry, its language, style, and themes. It will also highlight the influence of western poetic movements and schools on Arab poets.

08-401 Directed Studies in Arabic Language
This course is designed for students who wish to do independent research on any aspect of contemporary Arab literature and or to fulfill an Arabic language requirement.

08-402 Directed Studies in Arabic Culture
The course is designed for students who wish to do independent research on any aspect of contemporary Arab culture to fulfill a Minor in Arabic Studies requirement. (Pre-requisites: 01-150 and 01-151)

08-403 Directed Studies in Arabic Literature
These courses are designed for students who wish to do independent research on

any aspect of contemporary Arab literature and or to fulfill an Arabic language requirement. (Pre-requisites: 01-150 and 01-151)

RELIGION AND CULTURE

07-100. Religion and Culture
An introduction to the nature and important functions of religion and religious beliefs in contemporary culture.

07-222. Special Topics in Religion and Culture
An examination of important contemporary religious themes and issues. Since content varies from year to year, students may repeat the course for credit, with prior permission.

07-230. Christianity: Early Church to the Reformation
From the fall of the Western Roman Empire, the conversion of Europe, relations between Eastern Greek and Western Latin churches, struggle for supremacy between church and state, rise of monasticism, mysticism, and scholasticism, to the pre-reformation period.

07-231. Christianity: Reformation to the Modern Age
The break-up of Christendom and the founding of new religious denominations during the Protestant Reformation of the sixteenth century; the spread of European culture through colonialism; the impact of new cultural developments in the political, scientific, and economic realms to the nineteenth century.

07-322. God and Atheism in Western Culture
An examination of claims for belief in God, atheism, and postmodern skepticism, including the nature of religious faith, rational arguments for God's existence, revelation, and religious experience. (Prerequisite: Students must have completed at least semester 3 standing or obtained the permission of the instructor.)

07-323. God and Evil in Western Culture
An examination of traditional and contemporary attempts to reconcile the world's suffering and anguish with the existence of God. (Prerequisite: Students must have completed at least semester 3 standing or obtained the permission of the instructor.)

SECOND LANGUAGE EDUCATION

07-120. Introduction to Language and Linguistics
An introduction to the scientific study of language, including language structure, sound systems, semantics, language origins, language families and language classification, (Required of all Modern Languages majors and recommended in the first year of study.)

07-220. Language, Linguistics and Society
This course complements 07-120. The scientific study of language and its interaction with society: contextualized language use, discourse and text linguistics, social and regional variation, language and the brain, language processing, language acquisition, and writing systems. (Required of all Modern Languages majors. Recommended to take in sequence with 07-120)

07-320. Theories of Language Acquisition
An introduction to current theories regarding how language is acquired, with a special focus on the acquisition of second and additional languages, and on the factors that play a role in the acquisition process. (Prerequisites: 07-120 or 07-220, or equivalent or consent of instructor.)

07-321. Methodologies for Second Language Education
An introduction to current methods of second language teaching through an examination of curriculum development, lesson planning and classroom techniques. (Prerequisites: 07-120 and 07-220, or permission of instructor.)

07-357. Directed Studies Abroad I
This course will expose students to day-to-day situations, in order for them to complement and integrate traditional university learning with an immersion in real life situations. The intent is to stimulate an empirical attitude towards knowledge gained through experience. The focus of this course will be an in-depth analysis of differences and similarities between Canadian culture and the host culture. (Note: this is a Distance Education course offered in English which is available only to students on exchange through Windsor International at a location where English is not the local language.)

07-358. Directed Studies Abroad II
This course is a continuation of Directed Studies Abroad I. It will expose students to day-to-day situations, in order for them to complement and integrate traditional university learning with an immersion in real life situations. The intent is to stimulate an empirical attitude towards knowledge gained through experience. The focus of this course will be an in-depth analysis of differences and similarities between Canadian culture and the host culture. (Note: this is a Distance Education course offered in English which is available only to students on exchange through Windsor International at a location where English is not the local language.)

07-420. Second Language Education Practicum
SLE students will be required to design a second language education course for a specific clientele, deliver their curriculum and have that curriculum assessed critically. (Prerequisites: 07-320 and 07-321.)

GERMAN, ITALIAN AND SPANISH LITERATURE AND CULTURE

07-137. Introduction to German, Italian, and Spanish Literature
A study of the history and culture of European civilization through salient works of German, Italian and Spanish literature (in English translation).

07-237. German, Italian and Spanish Literary Traditions
A study of the forms and structures of German, Italian and Spanish literature (in English translation) including a survey of genres, styles and rhetorical figures. (Antirequisties: 07-237 and the former 07-334.)

07-337. Applied Literary Criticism
A hands-on approach to selected theories used to analyze literary texts and films. Students will read and write literary criticism, with an aim to understanding the underlying questions, assumptions, interpretive possibilities and limitations of each theoretical approach. (Students cannot obtain credit for both 07-337 and the former 07-437.)

07-437. Studies in German, Italian and Spanish Literary and Visual Culture
This course studies connections between the visual arts and literature in selected periods of Western culture from medieval to modern times. Special attention is paid to the social context of the periods in question, as well as stylistic implications. Interdisciplinary forays into adjacent fields such as architecture, music, psychology, and science may also be included. This is an advanced undergraduate course with special focus on critical methodologies and comparative research. Topics may vary from year to year. (Prerequisites: 07-137, 07-237 or approval of the instructor.)

CULTURE AND IDEAS

07-202. Culture and Ideas: From the Black Death to the Enlightenment
An interdisciplinary, team-taught survey course focussing on major issues and achievements in European civilization from the late Middle Ages to the era of the Enlightenment, including literary, religious, and philosophical writings as well as art and music.

07-203. Culture and Ideas: From the French Revolution to the Present
An interdisciplinary, team-taught survey course focussing on major issues and achievements in Europe and North America in the nineteenth, twentieth, and twenty-first centuries, including development in the visual arts, music, architecture, philosophy, religion, literature and science.

DIASPORA STUDIES

07-235. To Auschwitz and Beyond: Reflections on the Meaning of the Holocaust
An examination of responses to key issues raised by the Holocaust as reflected in postwar culture both in Canada and abroad. (Also offered as Languages, Literatures and Cultures 06-235)

07-236. Surviving Survival: Reflections on Genocide, War and Trauma
An examination of the impact of war, genocide, and trauma on individuals and communities, as reflected in film, literature, and the arts.

07-409. Directed Studies
Independent study for the advanced student who wishes to explore a specialized area of interest within the program under the supervision of a faculty member. (To be taken only under exceptional circumstances with the permission of the instructor and a program advisor. May be repeated for credit if the content is

different. Hours and assignments by arrangement.)

ASIAN STUDIES

10-100. Japanese for Beginners I
Provides a co-ordinated approach to the basic language skills of listening, speaking, reading, and writing. The elements of the writing system, Hiragana and Katakana, and a limited number of Chinese characters (Kanji) are progressively introduced. (Laboratory work.) (Only for students with no prior knowledge of Japanese.)

10-101. Japanese for Beginners II
Continuation of 10-100. (Prerequisite: 10-100 or equivalent.)

10-262. Special Topics in Chinese Culture
This course will provide a topical introduction to Chinese culture. The topics may be either historical or contemporary. Topics may change from year to year. (Students may repeat the course for credit if the content changes.)

10-264. Special Topics in Chinese Literature
This course covers the development of modern Chinese literature in English translation. Classic works and literary characters will be classified and analyzed. Students will compare different writing genres and integrate them with the socio-cultural background of modern Chinese writers. Students will be expected to present their own perspectives through written papers and oral presentations. (Three lecture hours per week.)

10-409. Directed Readings in Asian Studies
(May be repeated for credit with approval of LLC.)

GREEK AND ROMAN STUDIES

11-161. Introduction to Greek Civilization
An introduction to the cultural values and achievements of the ancient Greeks. Topics will include geography, history, mythology and religion, language and literature, art and daily life. (Recommended for prospective Greek and Roman Studies majors.)

11-162. Introduction to Roman Civilization
An introduction to the cultural values and achievements of the ancient Romans. Topics will include geography, history, mythology and religion, language and literature, art and daily life. (Recommended for prospective Greek and Roman Studies majors.)

11-211. Greek Prose
An introduction to ancient Greek prose literature from the fifth century BC to the second century AD, with selected readings in translation. Authors may include historiographers, orators, philosophers, or novelists. Topics may vary from year to year. (May be repeated for credit if content changes.)

11-212. Greek Poetry
An introduction to ancient Greek poetry from the eighth century BC to the second century AD, with selected readings in translation. Authors may include Homer, Hesiod, other early Greek poets, or dramatists (including those of tragedy, comedy, and the satyr play). Topics may vary from year to year. (May be repeated for credit if content changes.)

11-221. Latin Prose
An introduction to ancient Latin prose literature from the third century BC to the second century AD, with selected readings in translation. Authors may include orators, historiographers, novelists, or philosophers. Topics may vary from year to year. (May be repeated for credit if content changes.)

11-222. Latin Poetry
An introduction to ancient Latin poetry from the third century BC to the fourth century AD, with selected readings in translation. Authors may include dramatists, epic poets, elegists, or satirists. Topics may vary from year to year. (May be repeated for credit if content changes.)

11-265. Greek Art and Archaeology
A study of the artistic masterpieces and monuments of ancient Greece. Topics will include the search for Troy, the spirit of Greek sculpture, and Athens in the Golden Age. (Prerequisite: 11-161 or consent of instructor.)

11-266. Roman Art and Archaeology
A study of the artistic masterpieces and monuments of ancient Rome. Topics will include the tombs of the Etruscans and treasures of Pompeii and Rome in the days of the Caesars. (Prerequisite: 11-162 or consent of instructor.)

11-280. Topics in Classical Culture
A thematic examination of a single social historical topic in Greco-Roman antiquity. Topics may vary from year to year. (May be repeated for credit if content changes.)

11-320. Topics in Classical Literature
An in-depth study of some aspect of ancient Greco-Roman literature that may be thematic or generic in scope. Topics may vary from year to year. May be repeated for credit if content changes. (Prerequisite: 11-161 and 11-162, or consent of instructor)

11-330. The Ancient World on the Screen
An exploration of modern depictions of ancient Greece and/or Rome in movies and/or on television. (Prerequisite: 11-161 and 11-162, or consent of instructor.)

11-360. Topics in Ancient Material Culture
This rotating topics course provides an in-depth study of some aspect of ancient material culture that may be thematic or chronological in scope. Required readings more usually consist of ancient sources in English translation and/or articles in modern scholarly journals than formal textbooks. May be repeated for credit if content changes. (Prerequisite: 11-265 or 11-266).

11-370. Greek Mythology
A study of the myths and legends of ancient Greece. Modern theories of myth will be used to analyze the Greek material. They study will include both literacy sources in translation and the portrayal of myth in visual art and in architecture. (Prerequisite: 11-161 and 11-162, or consent of instructor.)

11-372. Roman Mythology
A study of the myths and legends of ancient Rome. Modern theories of myth will be used to analyze the Roman material. The study will include both literary sources in translation and the portrayal of myth in visual art and in architecture. (11-161 and 11-162, or consent of instructor)

11-401. Seminar in Classical Studies
An in-depth study of an aspect of Greco-Roman antiquity. Topics may vary from year to year. (Prerequisite: at least semester 5 standing, or consent of instructor)

11-450. Practicum in Classical Archaeology
Students will participate in various aspects (e.g. digging, artifact processing and analysis) of the excavation of an ancient Greek or Roman site in Europe. They will also visit and report on several key archaeological sites in the region. (Note: this is a 6-credit-hour course.) (Prerequisites: Admission only by consent of instructor after an interview with the candidate. Experience in Classical Studies courses (numbered 01-11-xxx and/or 01-12-xxx) is highly recommended, though not always essential. Given the nature of archaeological excavation abroad, the assembly of a team of hardworking, emotionally mature, and mutually compatible individuals is of paramount importance. All other factors being equal, preference will be given to Classical Studies majors over non-majors and to more senior students over more junior.) May be repeated for credit if content changes.

11-460. Directed Readings in Classical Civilization
Designed for the advanced student who wishes to explore a special area of interest with the aid of a faculty advisor. (May be repeated for credit if content changes.) (Hours by arrangement.)

GREEK AND ROMAN HISTORY

12-262. Greek History I: To the End of the Classical Period
This course is an illustrated survey of the historical and social development of Greek civilization from the Neolithic period (circa 6000 BC) to the death of Alexander the Great (323 BC), with particular emphasis on the political history of Athens in the sixth through fourth centuries BC. Selected readings of Greek texts in translation examine particular events or themes in greater depth. (Prerequisite: 11-161 or consent of instructor.)

12-263. Greek History II: To the End of the Hellenistic Period
This course is an illustrated survey of the historical and social development of

Greek civilization from the time of Alexander the Great's conquests (326-323 BC) to Rome's annexation of the last major Greek kingdom, Cleopatra's Egypt, in 30 BC. The continuing role of Greek cities under the Roman Empire can also be examined. Selected readings of Greek texts in translation examine particular events or themes in greater depth. (Prerequisite: 11-161 or consent of instructor.)

12-271. Roman History I: To the End of the Republic
An exploration of Roman social and political history from Rome's earliest foundations to the collapse of the Republic (1000-27 BC). This will include a close examination of the Roman conquest of the Italian peninsula, the Punic Wars and Civil Wars, as well as the study of such important figures as Hannibal and Julius Caesar. (Prerequisite: 11-162 or consent of instructor.)

12-272. Roman History II: To the End of the Empire
An exploration of Roman social and political history from the establishment of the Empire by Augustus to its fall (27 BC. - AD 476). This will include a close examination of the expansion and administration of the Empire and wars against the Parthians, Persians and Germans as well as the study of individual Emperors and other important literary and historical figures of the time. (Prerequisite: 11-162 or consent of instructor.)

12-310. Topics in Ancient History
This rotating topics course is an in-depth study of some aspect of ancient history that may be thematic or chronological in scope. Required readings usually consist of ancient sources in English translation and/or articles in modern scholarly journals than formal textbooks. May be repeated for credit if content changes. (Prerequisite: at least one 12-2xx course, or by consent of instructor)

12-460 Directed Reading in Ancient History
This directed reading course provides an advanced study of some aspect of Greco-Roman history that may be thematic or chronological in scope. The course is limited to Greek and Roman Studies majors in the final two years of their program. The particular topic and schedule of instruction in each case is to be determined by mutual agreement of instructor and student. (May be repeated for credit if content changes.) (Prerequisite: 12-310)

GREEK LANGUAGE AND LITERATURE

13-100. Introduction to Ancient Greek I
Designed to equip the beginner with the basic skills needed for reading ancient Greek literature, including the New Testament.

13-101. Introduction to Ancient Greek II
Designed to equip the beginner with the basic skills needed for reading ancient Greek literature, including the New Testament. (Prerequisite: 13-100.)

13-200. Intermediate Greek I
Review of vocabulary and grammar. Readings from classical prose, poetry, or the New Testament. (Prerequisite: 13-101.)

13-201. Intermediate Greek II
Continuation of 13-200. (Prerequisite: 13-200.)

13-450. Directed Readings in Greek Literature
Designed for the student who wishes to explore a special area of interest with the aid of a faculty advisor. (May be repeated for credit if content changes.) (Hours by arrangement.)

LATIN LANGUAGE AND LITERATURE

14-100. Introductory Latin I
Designed for the student with little or no background in Latin. Emphasis on attainment of reading skills prerequisite for Latin courses numbered 200- and above, and for practical use in theology, philosophy, medieval studies, linguistics, and comparative literature.

14-101. Introductory Latin II
Continuation of 14-100. (Prerequisite: 14-100 or consent of an advisor in Classics.)

14-200. Intermediate Latin I
Designed for students who have previously studied Latin. Review of forms, syntax and grammar. Selected passages from the works of Latin authors may be used. (Prerequisite: 14-101 or permission of a program advisor.)

14-201. Intermediate Latin II
Review of forms, syntax, and grammar. Selected passages from the works of Latin authors. (Prerequisite: 14-200 or consent of an advisor in Classics.)

14-450. Directed Readings in Latin Literature
Designed for the student who wishes to explore a special area of interest with the aid of a faculty advisor. (May be repeated for credit if content changes.) (Hours by arrangement.)

GERMAN LANGUAGE OPTION

Requirements for degree programs in German make reference to the following groups of courses:
German Language: 15-101, 15-102, 15-200, 15-202, 15-300, 15-301, 15-329
German Literature: 07-137, 07-237, 07-337
German Culture: 15-260, 15-261, 15-312, 15-336, 15-337, 15-338, 15-490

15-102. Intensive German for Beginners
This intensive language-training course combines the content of two courses into a single term. Students will obtain credit for two courses. Note: 6 hours of class time per week. (Only for students with no prior knowledge of German).)

15-202. Intensive Intermediate German
This intensive language-training course combines the content of two courses into a single term. Students will obtain credit for two courses. Note: 6 hours of class time per week. (Prerequisites: 15-101 or 15-102, or permission of instructor.)

15-248. German Cinema
This course will cover the main periods of German cinema: expressionism of the 1920s, propaganda films of the Nazi era, East and West-German Cold War cinema and films of the post-reunification period. The focus will be on German film language and the historic and cultural traditions.

15-260. German Culture and Civilization I
An interdisciplinary introduction to political, social, and cultural developments in Germanic lands before 1815. (Taught in English. No prerequisities. May be repeated more than once if content changes.)

15-261. German Culture and Civilization II
An interdisciplinary introduction to political, social, and cultural developments in Germanic lands from 1815 onward. (Taught in English. No prerequisites. May be repeated more than once if content changes.)

15-300. Advanced German I
Further study of grammar and syntax. (Prerequisite: 15-202 or permission of Program Advisor.)

15-301. Advanced German II
Continuation of 15-300. (Prerequisite: 15-300, or consent of a program advisor.)

15-400. Proficiency in German
Emphasis is placed on understanding a wide range of demanding and longer texts (press, literature, etc.) Students will enhance their ability to express themselves fluently and spontaneously. Students will use the target language flexibly and effectively for social, academic and professional purposes. Students will learn to communicate fluently in the target language using complex grammar structures as well as complex text production. (Prerequisite: 15-301 or permission of instructor)

15-401. Proficiency in Written German
This course seeks to consolidate and enhance writing and reading skills at an advanced level of proficiency. Topics of study may include: translation techniques, mastery of complex syntactical structures, study of disparate academic, journalistic and literary texts. (Prerequisite: 15-301)

15-490. Directed Readings in Germanic Studies
(Prerequisite: Consent of a program advisor.) (May be repeated for credit if content changes.)

ITALIAN LANGUAGE OPTION

Requirements for degree programs in Italian make reference to the following groups of courses:

Italian Language: 21-101, 21-102, 21-200, 21-300, 21-301
Italian Literature: 07-137, 07-237, 07-337, 21-450, 21-490
Italian Culture: 21-248; 21-260, 21-261, 21-331, 21-350, 21-356

21-102. Intensive Italian for Beginners
This intensive language-training course combines the course content of 21-100 and 21-101 into a single term. Note: 6 hours of class time per week. (Only for students with no prior knowledge of Italian) (Antirequisites: 21-100 or 21-101.)

21-202. Intensive Intermediate Italian
This intensive language-training course combines the content of two courses into a single term. Students will obtain credit for two courses. Note: 6 hours of class time per week. (Prerequisites: 21-101 or 21-102, or permission of instructor.) (Antirequisites: 21-200)

21-248. Italian Cinema
The course takes the student on a journey through fifty years of Italian history using subtitled films representative of three pivotal periods. The course is taught in English.

21-260. Italian Culture and Civilization I
The cultural traditions of Italy from early times to the end of the Middle Ages. (Taught in English.) (Italian majors will be expected to do assigned work in Italian.)

21-261. Italian Culture and Civilization II
The cultural traditions of Italy from the Renaissance to modern times. (Taught in English.) (Italian majors will be expected to do assigned work in Italian.)

21-300. Advanced Italian I
Emphasis on reading, understanding and writing commentaries on short literary, historical and journalistic texts with the support of reference tools. (Prerequisite: 21-202 or permission of Program
Advisor.)

21-301. Advanced Italian II
Continuation of 21-300. Emphasis on oral discussion of cultural and literary texts and written enhancement of idiomatic usage of the language with the support of appropriate tools. (Prerequisite: 23-300 or permission of program advisor.)

21-356. Renaissance Ideals: Sculpting the Italian Mind
This course will focus on the contributions of the Italian renaissance to literature, philosophy, religion, visual arts, political science and the natural sciences. The course will be taught in English.

21-400. Proficiency in Italian
Emphasis is placed on understanding a wide range of demanding and longer texts (press, literature, etc.) Students will enhance their ability to express themselves fluently and spontaneously. Students will use the target language flexibly and effectively for social, academic and professional purposes. Students will learn to communicate fluently in the target language using complex grammar structures as well as complex text production. (Prerequisite: 21-301 or permission of instructor.)

21-401. Proficiency in Written Italian
This course seeks to consolidate and enhance writing and reading skills at an advanced level of proficiency. Topics of study may include: translation techniques, mastery of complex syntactical structures, study of disparate texts (e.g. academic, journalistic, literary).(Pre-requisite: 21-301).

21-490. Directed Readings
Designed for the advanced student who wishes to explore a special area of interest in Italian literature. (May be repeated for credit if content changes.)

SPANISH LANGUAGE OPTION

Requirements for degree programs in Spanish make reference to the following groups of courses:
Spanish Language: 23-101, 23-102, 23-200, 23-300, 23-301, 23-330
Spanish Literature: 07-137, 07-237, 07-337
Spanish Culture: 23-260, 23-261, 23-329

23-101. Spanish for Beginners II
Basic skills of listening, speaking, reading, and writing and an introduction to

Hispanic cultures. (Prerequisite: 23-100 or equivalent.)

23-102. Intensive Spanish for Beginners
This intensive language-training course combines the content of 23-100 and 23-101 in a single term. Note: 6 hours of class time per week. (Only for students with no prior knowledge of Spanish.) (Antirequisites: 23-100 or 23-101.)

23-202. Intensive Intermediate Spanish
This intensive language-training course combines the course content of two courses into a single term. Students will obtain credit for two courses. (6 credit hours; 6 hours of class time per week.) (Prerequisites: 23-100 and 23-101, or 23-102.) (Antirequisites: 23-200 and 23-201.)

23-248. Spanish Cinema
This course will study the cinema of Spain and/or Latin America. The focus will be on important film directors, such as Saura, Almodovar or Buñuel as well as the main issues covered by these films (e.g. youth culture, perception of women, literature and film, social analysis, etc.). The course will place the films into an historic, social and artistic context. The course is conducted in English with subtitled or dubbed films.

23-260. Culture and Civilization of Spain
Readings and discussion, in English, of topics from the history and culture of Spain.

23-261. Culture and Civilization of Spanish America
Readings and discussion, in English, of topics from the history and culture of Spanish America.

23-300. Advanced Spanish I
Further study of grammar and syntax. Written and oral exercises emphasizing subtle and/or particularly difficult grammar points. (Prerequisite: 23-221, 23-202 or permission of Program Advisor.)

23-301. Advanced Spanish II
Continuation of 23-300. (Prerequisite: 23-300 or permission of Program Advisor).

23-317. Spanish for Business
An introduction to the specialized business vocabulary and business practices of Spanish speaking countries. (Prerequisites: 23-202)

23-330. Language Training through Literature from Spain
A study of literary texts from Spain as a means to improve language mastery through advanced review of grammatical structures and enhancement of vocabulary. The course is conducted in Spanish. (Prerequisite:23-301 or permission of instructor.)

23-400. Proficiency in Spanish
Emphasis is placed on understanding a wide range of demanding and longer texts (press, literature, etc.) Students will enhance their ability to express themselves fluently and spontaneously. Students will use the target language flexibly and effectively for social, academic and professional purposes. Students will learn to communicate fluently in the target language using complex grammar structures as well as complex text production. (Prerequisite 23-301 or permission of instructor)

23-490. Directed Study
(May be taken more than once if content changes.) (Prerequisites will vary depending on the focus of the course.) (Can not obtain credit for both 23-450 and 23-490.)

FRENCH STUDIES

All courses with the prefix 29- are taught in French. Not all courses are offered every year. Please contact the French Studies program at the Department of Languages, Literatures and Cultures office or its web site at www.uwindsor.ca/french.

Courses are three hours a week (3.00 credit hours) unless otherwise indicated. Language and linguistics courses may require laboratory and/or field work.

An antirequisite is a specific course or level of attainment which, if already successfully completed, does not permit registration for credit in another desired course, or which may not be taken for credit concurrently with another course.

29-114. Preparatory French: Intermediate Level II
Further training in grammar. Reading and writing skills. Additional aural comprehension and oral practice. Laboratory work. This course is equivalent to Grade 12“U” French or equivalent. (Antirequisite: Grade 12“U” French or equivalent, or higher.) (Prerequisite: Grade 11 French, or equivalent.)

29-121. French Language Training I
A study of norms and functions of the French verb system, nouns, pronouns, and modifiers. Oral practice, pronunciation and composition. (Prerequisite: Grade 12“U” French or Français, or equivalent.) (Antirequisite: any previous 200-level French language training courses.)

29-122. French Language Training II
Further study of the norms and functions of the French verb system, nouns, pronouns, and modifiers. Development of reading comprehension. Oral practice, composition. (Prerequisite: Grade 12“U” French or Français, or equivalent.) (Antirequisite: any previous 200-level French language training courses.)

29-123. Intensive French Language Training I
This intensive language-training course combines the course content of 29-121 and 29-122 into a single term. Students will obtain credit for two courses. (6 credit hours; 6 hours of class time per week.) (Prerequisite: Grade 12 “U” French or Français, or equivalent.) (Antirequisites: 29-121, 29-122 and any previous 200-level French language training courses.)

29-141. Introduction to Literary Studies
An introduction to the analysis of literary genres: poetry, drama and prose fiction. (Prerequisite: Grade 12“U” French or Français, or equivalent.) (Note: 29-141 is a prerequisite course for all literature courses in French Studies.)

29-215. Oral Proficiency in French I
A course designed to strengthen the student's competence in oral French through intensive training at an intermediate level, in both oral expression and aural comprehension. (May not be taken for credit by native speakers of French.) (Prerequisite: permission of instructor.)

29-221. French Language Training III
Effective oral and written communication; practice in the logical development of ideas; vocabulary expansion. (Prerequisites: 29-121 and 29-122, or 29-123.)

29-222. French Language Training IV
Effective oral and written communication. Demonstration and discussion of the spoken and written codes, oral exercises, written practice
(Prerequisites: 29-121 and 29-122 or 29-123 (double credit.)

29-223. Intensive French Language Training II
This intensive language-training course combines the course content of 29-221 and 29-222 into a single term. Students will obtain credit for two courses. (6 credit hours; 6 hours of class time per week.) (Prerequisites: 29-121 and 29-122, or 29-123.) (Antirequisites: 29-221 and 29-222.)

29-230. Introduction to Linguistics I
A survey of fundamental linguistic concepts and ideas of language. Language analysis at the first three levels of description: phonetics, phonology and morphology. (Prerequisites: 29-121 and 29-122, or 29-123, or permission of instructor.)

29-231. Introduction to Linguistics II
Language analysis at the remaining levels of description: syntax, semantics, discourse analysis and pragmatics. A brief introduction to sociolinguistics, psycholinguistics and neurolinguistics.
(Prerequisites: 29-121 and 29-122, or 29-123, or permission of instructor.)

29-252. French Classicism
An introduction to the literature of seventeenth-century France and its principal doctrines. (Prerequisite: 29-141.)

29-253. The French Enlightenment
An introduction to the literature and thought of eighteenth-century France. (Prerequisite: 29-141.)

29-255. French Romanticism
A study of the romantic aesthetic through the poetry, prose, and drama of major

romantic writers of the nineteenth century. (Prerequisite: 29-141.)

29-257. Realism and Naturalism
A study of post-romantic prose writing in the nineteenth century. (Prerequisite: 29-141.)

29-260. Modern French Culture
A general study of the patterned behaviour which constitutes the modern French cultural system, focusing on its intellectual, sociological, political, and religious aspects. Students will be required to read texts and will also avail themselves of the latest audiovisual technology. Prerequisites: 29-121.)

29-270. Introduction to the Cultural Heritage of French Canada
An introduction to the francophone cultural experience in Canada.(Prerequisites: 29-121)

29-281. Introduction to the Culture of Sub-Saharan Francophone Africa
An introduction to various cultures of sub-Saharan Francophone Africa from pre-colonial times to the present. Students will be required to read some historical texts and representative literature. Some television documentaries and films will also be viewed. (Prerequisites: 29-121)

29-283. Introduction to Francophone Culture of the Maghreb and the Middle East
An introduction to contemporary francophone culture in North Africa (Morocco, Algeria, and Tunisia) and the Middle East (Lebanon), largely through the study of films, popular music, media, newspapers, art exhibits and/or television programs as well as theoretical works that formulate the (post)colonial discourse. (Prerequisites: 29-121).

29-284. The Novel in Quebec and in Other Francophone Regions of Canada
From the novel of the land to the post-modern novel in Francophone Canada. (Prerequisite: 29-141.)

29-315. Oral Proficiency in French II
A course designed to strengthen the student's competence in oral French through intensive training at an advanced level, both in oral expression and aural comprehension. (Prerequisite: permission of instructor.)

29-317. French for Business
A study of business terminology in French, and of the business practices of French speaking countries. (Prerequisites: 29-221, and 29-222, or 29-223.) (Note: 29-317 may replace 29-215 or 29-315.)

29-325. Error Analysis
A course designed to strengthen the student's competence in French through an analysis of the three most common sources of errors: the differences between spoken and written French, the first language and the interlanguage (unfinished French grammar) of the student. (Prerequisites: 29-221 and 29-222, or 29-223.)

29-328. Aspects of Translation I
A comparative analysis of French and English structures with special emphasis on translation processes. Accompanied by regular exercises in translation. (Prerequisites: 29-221 and 29-222, or 29-223.)

29-329. Aspects of Translation II
A comparative analysis of French and English structures with special emphasis on questions of meaning related to the sentence and its context. Accompanied by regular exercises in translation. (Prerequisites: 29-221 and 29-222, or 29-223.)

29-330. Applied Linguistics
An introduction to modern linguistic theories about language acquisition, followed by a comparative study of first and second language acquisition and a survey of second language teaching techniques highlighting the linguistic concepts underlying these techniques. (Prerequisite: 29-230 and 29-231.)

29-332. The History of the French Language
This course will examine successive stages in the development and spread of the French language from Late Antiquity to the present. (Prerequisite: 29-230 and 29-231, or permission of instructor.)

29-333. Sociolinguistic Aspects of French in Canada
A survey of the main characteristics of French in Canada with emphasis on its variations and varieties. Sociolinguistic concepts are introduced and discussed in

relation to the situation of French in Canada. (Prerequisites: 29-230 and 29-231.)

29-350. French Literature of the Middle Ages and the Renaissance
This course will examine the major authors and genres of the Middle Ages and the Renaissance, from the twelfth to the sixteenth century, including: the chanson de geste, the love songs of the troubadours, the Arthurian Romance, the sonnets of Ronsard, and the works of Rabelais. (Prerequisite: 29-141.)

29-353. Poetry from Baudelaire to Surrealism
A study of post-romantic, modernist poetry from the mid-nineteenth century to the mid-twentieth century. (Prerequisite: 29-141.)

29-354. The Modern Novel and Theatre
A study of modern theatre and of the novel from the turn of the century (1900) until the Nouveau Roman. (Prerequisite: 29-141.)

29-356. Contemporary Francophone Literature and Thought
The post-modern aesthetic and writing in francophone countries of sub-Saharan Africa and the French West Indies. (Prerequisite: 29-141.)

29-357. Contemporary Critical Theory
An introduction to a variety of major critical approaches and their applications to the literary text. (Prerequisites: 29-141, plus two additional courses in literature.)
(Note: 29-357 is a required course for students enrolled in an Honours Bachelor of Arts in French Studies, and will be of particular value to those intending to pursue a Master of Arts degree.)

29-358. Francophone Literature of the Maghreb and the Middle East
Introduction to Francophone literature of the Maghreb (Morocco, Algeria, Tunisia) and the Middle East (Lebanon) (Prerequisite: 29-141)

29-383. Drama in Quebec and in other Francophone Regions of Canada
A study of the main dramatic works in Francophone Canada. (Prerequisite: 29-141.)

29-385. Poetry in Quebec and in other Francophone Regions of Canada
A study of the main works of poetry in Francophone Canada. (Prerequisite: 29-141.)

29-434. The French Lexicon
Detailed examination of the morphological, semantic and sociolinguistic characteristics of the French lexicon. (Prerequisite: 29-231.)

SPECIAL TOPICS COURSES

29-400 to 29-496. Special Topics
Special topics courses include the 400-series courses listed in the French Studies program. They cover language, linguistics and literature and may take the form of directed readings. (Prerequisites for special topics courses in language and linguistics: 29-230 and 29-231; for special topics courses in literature: 29-141; plus one additional course in literature.)
(May be repeated for credit if content changes.)

DIRECTED READINGS

29-497 to 29-499.
(Prerequisite: Permission of instructor.) (May be repeated for credit if content changes.)

STUDIES OUTSIDE THE UNIVERSITY OF WINDSOR

Students can immerse themselves in the French language and culture by spending their third year at the Université de Nice, France, in a program operated jointly with The University of Western Ontario, The University of Guelph and Memorial University, or can spend their third year at any of the French universities participating in the Ontario/Rhône-Alpes student exchange.

Students can also pursue studies in French at the Université du Québec à Montréal at the undergraduate level, for one or two semesters.

It is also possible to pursue studies in French at Quebec universities with the Summer Language Bursary Programme, or to study in Quebec for a year and be

paid as a part-time, second-language monitor.

Fall 2015 Undergraduate Calendar

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COMMUNICATION, MEDIA, AND FILM: COURSES

Communication Studies 40-101 is required of all majors and is to be taken in the first year. For non-majors, this course is recommended prior to taking even those upper-level Communication, Media, and Film courses for which no specific prerequisites are listed. This introductory study of the media and its operations, within a rich context of history, theory, and cultural policy, is designed to enhance media literacy.

Students may register in upper-level courses if specific prerequisites are met, or with consent of the instructor or program advisor.
Not all courses listed will necessarily be offered each year. All courses are three hours per week (3.00 credit hours) unless otherwise indicated.

40-101. Introduction to Media and Society
An overview of major themes, concepts and issues that inform the field of Canadian communication studies. Topics may include: the political, economic, historical, and cultural contexts of communication; new media; policy issues and concerns; representation; the role of media in the social construction of reality and the broad interaction between media and society. (2 lecture, 1 tutorial hour per week.)

40-112. Introduction to Media Design and Production
An introduction to fundamental concepts, methods and strategies used to create specific meaning, emotional impact and consumer behaviour through both the analysis and creation of messages. In-class workshops and experiential learning exercises provide students with basic production skills in audio-visual design including image composition, sound recording, video project editing, and web content/social media creation. Combining both studio and field based learning, students will research various media/delivery channels, potential demographics, script write, shoot and edit basic projects. (Restricted to first year Honours students in Communication, Media and Film or combined four-year Honours programs with Communication, Media and Film). (2 lecture, 2 laboratory hours per week)

40-140. Introduction to Film Studies
Cinematic appreciation is studied through one or more of the following methods, at the instructor's discretion: an examination of great films, specific actors, auteurs, film genres or movements. Films may be critically studied within their cultural, historical, political and socio-economic context. (2 hour lecture, 2 hours screening per week).

40-200. Critical Digital Literacies
This course provides competencies in digital media literacy including a critical exploration of on-line behaviours and practices, evaluation of on-line information sources and use of a variety of platforms to disseminate knowledge. Topics may include: ‘selfies’ and the Web's ‘visual turn;’ children’s/youth culture in a digital age; video games and simulated violence; cultural, ethical and legal ramifications of social media.

40-201. New Media Studies
This course introduces students to theories of new media, explores the historical emergence of digital media forms and examines their social, cultural, political and economic implications. Topics may include: “old” and “new” media, convergence, political economy of new media, the digital divide, social networking, participatory cultures and Web 2.0 (i.e. Facebook, Twitter, YouTube, etc.) (Prerequisite: 40-101)

40-203. New Media and Social Movements
This course charts the history and contemporary manifestations of the role of new media technologies in the formation of such social movements. A variety of activists, advocacy groups and social movements have used new/social media technologies and platforms to coordinate and organize their activities, to intervene in the public sphere and to document, share and shape their own narratives. Topics may include: mainstream media frames and social movements, social control and mass-mediated social movements, social media and political organizing, user-generated content, and Web 2.0. (Prerequisite: 40-101 and at least semester 3 standing)

40-205. Introductory Photography
This introductory course in film and chemical photographic processes provides an opportunity for students to explore techniques and concepts within the medium of photography. Students will learn the basic technical skills of operating cameras, processing film, and making black and white prints, through a series of concerns specific to photography. (Prerequisite: 40-101 and 40-110 or 40-112 and Communication, Media and Film Major; students must have a 35mm adjustable film camera to complete this course.) (Also offered as Visual Arts 27-253.) (Lab fees may apply.)

40-210. Speech Communication to Inform
A beginning course designed to help the student to develop poise and confidence in communicating information. (Two lecture and one lab hours per week.) (Not available on an Audit basis.) (Also offered as 24-210)

40-213. Podcasting and Internet Media
This course introduces students to the craft of production for the Internet, specifically in the form of video and audio podcasts. Students will acquire skills in a variety of software applications to produce and circulate podcasts. Emphasis will also be placed on the creation of quality content through the examination of niche audiences and current practices in digital media production and distribution. (Pre-requisite: 40-101 and 40-112.) (2 lecture hours and 1 laboratory hour per week)

40-218. Digital Media Production I
In this project-based course, students will work in groups to write proposals, scripts and storyboards while also familiarizing themselves with the terminology, aesthetics, mechanics and equipment associated with producing, lighting, shooting and editing video for studio and location-based projects. (Prerequisite: 40-111 or 40-112; Restricted to Honours students in Communication, Media and Film or combined four-year Honours programs with Communication, Media and Film) (2 lecture, 2 laboratory hours per week)

40-219. Digital Media Production II
This course puts into practice concepts and skills learned in Digital Media Production I. Students pitch project ideas that are then selected based on merit and work in teams to research, write, shoot and edit digital media productions targeted to specific external screening venues. A variety of production techniques are explored appropriate for fiction, non-fiction, experimental, etc., genres. (Prerequisite: 40-218; Restricted to Honours students in Communication, Media and Film or combined four-year Honours programs with Communication, Media and Film) (2 lecture, 2 laboratory hours per week)

40-221. The Art of Photo-blogging
In this course students will develop and design photography-based blog projects that combine effective research and writing skills with the creative use of image capture as a tool for visual communication. Students will learn photographic techniques and image editing software as well as communication strategies, applicable Canadian copyright laws, web analytics and search engine optimization. (Prerequisite: 40-111 or 40-112; Restricted to Honours students in Communication, Media and Film or combined four-year Honours programs with Communication, Media and Film) (2 lecture, 2 laboratory hours per week)

40-225. Media Literacy
A critical exploration of how the media contribute to the social construction of reality. Students will develop the skills and conceptual frameworks necessary to interpret and investigate the contemporary media environment with a particular focus on examples derived from Canadian informational/news sources and popular culture. Topics may include: media coverage of social and political issues, political economy of media/culture industries, media and democracy, media representation and stereotypes.

40-234. Research Methods in Communication
An introductory overview of research approaches, methods, and designs in communication studies. Students will learn about the theoretical grounding of quantitative, qualitative, and interpretive methods, and practice various methods to explore communication issues. (Prerequisites: 40-101 or Labour Studies Majors must have semester 3 standing) (2 lecture hours and 1 tutorial hour a week.)

40-240. Cinema History I (Pre-War)
The course charts the early history of the cinema from its inception to World War II: film shorts at the turn of the century, the silent film era, the introduction of sound, and the decline of the studio system. Films are examined as technical, industrial, commercial, artistic, and, most importantly, as historical artifacts.

Industry, audience, and the development of cinematic language are viewed within an international framework and their local cultural context.

40-241. Cinema History II (Post-War)
The course examines films from the post-War period to the present: the heyday of the classical Hollywood narrative and challenges to its dominance from European neo-realism and the avant-garde film movement are considered. Films are viewed as influenced by and reflective of social upheaval of the sixties, as well as their consolidation within distinct but mutually influencing categories of mainstream and alternative cinema. An important consideration is how films can either paper over or expose social fractures along the lines of gender, race, sexuality, and nationalism.

40-243. Media Aesthetics
The course provides a basic set of principles and tools to understand the formal qualities of visual signification and the broader contours of visual culture. Students learn aesthetic and technical terms, rules, conventions, and social assumptions used to construct meaning through sound, images, or graphics in stills, film, television and the web. The course offers a grounding useful for both producers and consumers of visual images. (Prerequisite: 40-101 or 40-112).

40-245. Communication and Cultural Policy in Canada
This course surveys the historical development of communication and cultural policy in the Canadian context. Students will investigate particular culture industries (e.g. music, film, television, etc.) and key themes (nation-state, public sphere, globalization, media convergence) that have informed policy debates as well as the structure, performance and regulation of culture/media industries. Topics may include: the role of the State in cultural production, national culture, citizenship, identity and multiculturalism, representations of 'Canada' in the popular imagination. (Prerequisite: 40-101.)

40-260. Fundamentals of Writing for Media
This course provides grounding in the theory and practice of writing, editing and preparing textual materials for print, broadcast, public relations, new/social media and web contexts. Through practical assignments and lab exercises, students develop effective research, information-gathering, writing and editing skills. Topics may include: the impact and implications of technological change and media convergence, libel and copyright laws/policies and ethical practices in the digital age, public relations and strategic communications for non-profit groups and community organizations. (Prerequisite: 40-101 and at least 3rd semester standing) (1 lecture hour and 2 lab hours a week or 2 lecture hours and 1 lab hour a week)

40-270. Speaking Truth to Power: Voice and Activism
An examination of contemporary struggles for social change with a particular focus on anti-consumerist and environmental justice campaigns. Students learn to create persuasive social justice messages. (Prerequisite: Semester 3 or above standing.) (Also offered as Dramatic Art 24-270 and Labour Studies 54-270)

40-272. Theory of Message Design
An exploration of theories affecting message analysis and communication. Topics include persuasion, ethics, perception, attention, memory, and message analysis. Students will learn how to recognize formal features of messages and how to apply theory to practical message design situations. (Prerequisite: 40-101. Recommended: prior completion of a first-year Psychology course.)

40-275. Theories of Communication and Media
This course introduces students to various theorists and schools of thought that have shaped the discipline of communication/media studies within the Canadian context, traces the development of theoretical approaches to communication forms and processes and explores a variety of underlying philosophical perspectives and assumptions in communication and media theory. (Prerequisite: 40-101.) (2 lecture hours and 1 tutorial hour a week.)

40-290. Special Topics in Communication, Media and Film
Special Topics courses will be offered occasionally to meet a demonstrated academic/disciplinary need that cannot be satisfied by regular course offerings. (Prerequisite: 40-101) (May be repeated for credit if the topics differ.)
(Prerequisite: 40-101.)

40-301. Digital Technologies and Everyday Life
This course surveys critical theories of technology with a focus on how evolving and emerging communication/digital technologies are received and adapted and

how they shape practices in various institutional contexts and in everyday life. Topics may include: representations of technology, technologies and the organization/perception of space and time, privacy/surveillance, gender, labour, the environment and technology. (Prerequisites: 40-201 or 40-275.)

40-302. Popular Culture
Examines the relationship between popular culture and questions of economics and social and cultural politics, through an exploration of struggles over knowledge, power and authority manifest in popular cultural artifacts and processes. Intended to provide students with tools for critical evaluation of contemporary popular culture, including the constitution of social ideologies, values and representations through cultural artifacts. (Prerequisite: 40-275.)

40-304. Privacy, Surveillance and Security in the Digital Age
This course provides an historical examination of the conceptual apparatuses that have traditionally framed understandings of the right to privacy, critically assesses the capacities of the State and corporate entities to monitor digital activities and explores the social, political and economic implications of surveillance practices. Topics may include: user-generated surveillance, mobile technologies, cloud computing, geo-locating technologies, tracking software, and data mining in social media contexts. (Prerequisite: 40-201)

40-318. Field and Studio Sound Recording
An overview of the theoretical and practical aspects of audio including frequency range, khz, bits and file formats in accordance with industry standards (i.e. Pro-Tools). Students will learn advanced techniques and principles of sound mixing for music, video, games and web content. (Prerequisites:; Portfolio review and a 70% average in Communication, Media and Film Honours or Combined Honours Programs and permission of instructor.) (2 lecture, 2 laboratory hours per week)

40-319. Digital Documentary Production
This course examines theories, techniques and styles of modern documentary as well as other non-fiction forms such as the photo-essay. Students may investigate different sub-genres of the documentary approach and create productions/media campaigns that explore specific personal, social and/or community/campus related issues. Advanced research skills will be emphasized. Readings and in-class screenings will focus on the theory and practice of documentary for social change. (Prerequisites: 40-219 and 40-234; Portfolio review and a 70% average in Communication, Media and Film Honours or Combined Honours Programs and permission of instructor) (2 lecture, 2 laboratory hours a week)

40-320. Screenwriting Fundamentals
This course explores the theory and craft of the screenplay with a focus on writing for short film and video projects. A central goal of the class is to refine student filmmakers' storytelling and scripting skills and to impart the conventions of this specialized genre through writing assignments, discussion, and analysis of texts via screenings and readings. (Pre-requisites: admission to advanced production courses or permission of the instructor) (3 lecture hours)

40-322. Labour, Workplace and Communication
The course involves a critical exploration of the relationships between labour and information technology from a communication perspective. Both political economy and cultural studies approaches are used to analyze the everyday experiences of individuals in both their paid and unpaid labour. Issues examined may include Scientific Management and Fordism/Post-Fordism, globalization, electronic surveillance, the natural environment, and the intersection(s) of race/ethnicity, class, and gender. (Also offered as Labour Studies 54-322). (Prerequisites:40-275 or Labour studies majors must have at least semester 4 standing.) (Credit cannot be obtained for both 40-321 and 40-322.)

40-327. Digital Video Editing and Post-Production
This course provides an examination of the historical, aesthetic and theoretical aspects of editing and post-production. Through screenings, workshops, praxis-based pedagogical approaches and group assignments, students will explore various editing styles and acquire advanced editing skills in accordance with industry standard software. (Prerequisite: 40-219; Portfolio review and a 70% average in Communication, Media and Film Honours or Combined Honours Programs and permission of instructor) (2 lecture, 2 laboratory per week)

40-334. Methods of Mass Media Criticism
This course examines contemporary methodological approaches to the study of mass media artefacts, signifying systems and representational politics. Topics may include: content analysis, cultural studies, discourse/textual analysis,

semiotics, genre study, feminist criticism, audience research, on-line ethnography, web-based inquiry. (Prerequisites: 40-234 or 40-275)

40-343. Cinema and/in Culture
This intermediate course on cinema focuses on shifting topics that underscore contemporary approaches to studying the culture and politics of cinema as a medium. Topics may include: film auteurs, film practice modes, genres, movements, national cinemas, representational politics of race, gender and sexuality; spectatorship/reception, star system, transnational productions/flows. (Prerequisites: 40-240 or 40-241)**.**

40-350. Scriptwriting for Visual Media
This course explores the theory and craft of writing for visual media. With a focus on developing and applying concepts of visual storytelling and writing for production, students will generate original scripts for a variety of fiction and non-fiction genres and media platforms. Through writing assignments and analysis of texts via screenings and readings, emphasis will be placed on different script formats, storyline development, dialogue, theme, character arc and aesthetics. (Pre-requisites: 40-219 or 40-260 and at least 5th semester standing) (2 lecture hours and 1 hour lab)

40-360. Public Relations, Media and Society
An examination of the historical and contemporary role and influence of the public relations industry on media discourses and the shaping of public opinion. Students will critically explore and evaluate Public Relations (PR) techniques and practices. Topics may include: the emergence of the PR industry; "spin" and the engineering of consent; corporate and government PR relationship between PR and informational media. (Prerequisites: 40-101 and 40-225 or 40-260 or 40-272)-

40-364. Media, Technology and the Environment
This course explores the relationship between media practices, representations, communication technologies and the environment. Topics may include: media constructions of the environment; mainstream and alternative media coverage of environmental movements and issues; environmental impact of communication practices, technological advancements and consumer culture; environmental themes in advertisements, corporate greenwashing. (Prerequisite: 40-201 or 40-225.)

40-370. Alternative Media and Digital Activism
This course examines existing theory and scholarship on alternative media and media activism and explores the ways in which activists and citizen group's use/have used "old" as well as new media and emerging technologies to challenge mainstream media narratives and express alternative views on a range of social and political issues. Special emphasis will be placed on the Canadian context. Topics may include: mainstream versus alternative media framing; historical roots of Canadian alternative media; media reform movements; participatory journalism; culture jamming; the tactics, strategies, aesthetics and goals of alternative/activist media. (Prerequisite: 40-201-or 40-225.)

40-375. Critical Approaches to Media and Culture
This course explores contemporary theories and methods related to the critical study of media and culture including Marxian and neo-Marxian political economy, the Frankfurt School, Gramscian hegemony theory, structuralism, semiotics, cultural studies, social constructionism, postmodernism, poststructuralism, and feminism. Topics may include: political economy of media and the culture industries; the production, consumption, and circulation of cultural texts and artefacts; the materialities of communication and the politics and practices of representation. (Prerequisite:40-275.)

40-381. Advertising in Historical and Cultural Context
This course contextualizes advertising and branding within the history of capitalism and contemporary consumer culture. The course draws upon approaches from Marxism, sociology, feminism, and other critical perspectives. Topics may include: the historical rise of consumer culture, advertising's reciprocal and structural relationship with media, controversial advertising categories, issues of representation and meaning and the ideological dimensions of advertising and branding. (Prerequisites: 40-101 and 40-225.)

40-382. Advertising in the New Media Era: Contemporary Issues and Practices
This course considers how "new media" formations including Internet, streaming, mobile, social, and user-generated media have altered the advertising industry and advertising practices. Topics may include: advertising's structural influence

over new media technologies and platforms, new media audiences/users, advertising strategy, privacy and policy. Students will learn advertising skills and techniques required to propose, plan, and execute campaigns in the new/social media environment. (Pre-requisite: 40-381)

40-390 Special Topics in Media and Society
This Special Topics course will explore contemporary issues relevant to understanding the links between media institutions, cultural texts/forms and social practices. The specific focus will vary based on faculty expertise (Prerequisite: 40-275 and at least semester 4 standing). (May be repeated for credit if the topics differ.) (Prerequisites: 40-275 and at least semester 4 standing.)

40-398. Internship I
Application of communication skills and knowledge in work experience situations. Admission to the course is by consent and is available only to four-year Honours students. The course is graded by the Undergraduate Advisor on the basis of a written report plus other references. (Prerequisite: Semester 6 standing and approval of Undergraduate Advisor in Communication, Media and Film.)

40-399. Internship II
(Same description as 40-398.)

40-401. Advanced Topics in New Media and Digital Culture
This seminar provides an in-depth exploration of the diverse social, economic, political, cultural and artistic practices that constitute the contemporary new media landscape. Through an examination of web 2.0 technologies/digital platforms and their formations, structures, limits and possibilities, students will be engaged as both content consumers and producers. Topics may include: social networking as immaterial labour, art in the age of digital reproduction, cyber-identity/community, new media and public policy, digitally-mediated activism/social movements. (Prerequisite: 40-301.)

40-403. Advanced Studies in Media Culture
This seminar explores various theoretical approaches to the study of media culture including semiotics, cultural ethnography, Critical theory, feminism, social constructionism, structuralism and postmodernism. Students will practically apply theoretical frameworks to an examination and interpretation of contemporary media forms and practices. (Prerequisites: 40-275 and one of 40-302, 40-334 or 40-375.)

40-423. Advertising/Marketing Campaign Production
This advanced course integrates knowledge and skills acquired in previous theory and production courses. Working in groups, students will obtain hands-on experience in the production of advertising/marketing campaigns for various delivery formats, including social media. The class will focus on graphic design programs, script writing, the digital editing of video, stills and audio, audience research and ethical standards in advertising. (Prerequisites: 40-219 and one of 40-318, 40-319 or 40-327 ; Portfolio Review and a 70% average in Communication, Media and Film Honours or Combined Honours Programs and permission of instructor) (2 lecture, 2 laboratory hours per week.)

40-424. Advanced Non-Fiction Media Production
This course integrates theories and practices of digital media with an emphasis on professional standards and skills and is focused on the creation of content for, and design of, a course website on non-fiction digital media. Students will plan, write, shoot, edit and compress news and documentary projects and manage all website tasks including flowchart planning, wireframe modeling, creation and marketing. This course may be repeated once for credit with permission of the instructor and the Undergraduate Advisor/Department Head. (Prerequisite: One of 40-318, 40-319 or 40-327; Portfolio review and a 70% average in Communication, Media and Film Honours or Combined Honours Programs and permission of instructor) (2 lecture, 2 laboratory hours per week.)

40-425. Advanced Studies in the Sociology of News Media
This seminar course explores and investigates the role played by mass media in power relations and the social construction of reality from a critical political economy perspective. Topics may include: the political economy of mainstream media, including issues of media ownership and control; the intersections of media, corporate and governmental power; mainstream media coverage/representation of domestic and foreign affairs. (Prerequisite: 40-225 or permission of the instructor)

40-426. Advanced Message Design

Students will learn how to design communication units for information, training, and teaching situations, using a systematic procedure from instructional technology. Students will apply theories from communication, persuasion, and learning to determine needs, design a communication strategy, select appropriate media, and evaluate the effort. (Prerequisite: 40-272.) (3 lecture hours or 1 lecture hour and 2 lab hours a week.)

40-428. Senior Project
In this course, students may produce content across a range of new media platforms. Emphasis will be on demonstrating professional capabilities in the areas of critical thinking, proposal writing, project development, creation and distribution. The course synthesizes both theoretical and practical learning acquired throughout the program and offers students the opportunity to further advance their production portfolio. This course may be repeated once for credit with permission of the instructor and the Undergraduate Advisor/Department Head. (Prerequisites: One of 40-318, 40-319 or 40-327; Portfolio review and a 70% average in Communication, Media and Film Honours or Combined Honours Programs and permission of instructor) (2 lecture, 2 laboratory hours per week.)

40-436. Advanced Research Methods
This course provides an in-depth examination of quantitative and qualitative research methods appropriate to the investigation of communicative processes, traditional and new media/digital formations. Using one of more of the topics covered in the course, student groups will design and implement a primary research project that includes data collection, analysis and effective communication of results/findings. Topics may include: content analysis, textual analysis, focus groups, interviews, participant observation, social network analysis, online surveys, research ethics. (Prerequisite: 40-334.)

40-441. Documentary Film and Video I
An introduction to the history, theory, and practice of documentary film. The course provides an overview of the history of documentary with attention to artistic, technological, economic, and political influences and offers students the opportunity to put theoretical study into practice. (Prerequisites: Third-year standing and at least one of the following: 40-110, 40-240, 40-241.) (4 lecture hours a week.)

40-443. Advanced Film Theory and Criticism
This seminar course examines the changing theoretical and critical approaches to film, including issues in the production and reception of film, such as realism, adaptation, convention, signification, and culture. (Prerequisites: 40-240 and 40-241)

40-450. Border Culture
This course addresses the role of borders in contemporary global culture as both physical boundaries and affective conditions. In the context of the Windsor-Detroit border, students from the University of Windsor will exchange viewpoints based upon the experience of living in a border culture. Seminars and field trips will take up the topic of borders from a number of perspectives and contexts. Students will look at historical and contemporary ideas about borders that have been articulated in various disciplines: from political theory and cultural geography, to urban planning, art, literature, architectural and spatial theory. (Open to majors and non-majors.) (Prerequisites: 28-150 and semester 4 standing.) (Also offered as 28-450)

40-462. Communication Perspectives and Aboriginal People, Race and Ethnicity
Explores theoretical and practical communication issues of race and ethnicity and links these issues to the practice of social justice. Topics include: historical and critical implications of identity politics, media (mis-) representation, cultural policy, First Nations, multicultural and multiracial media production. (Prerequisites: 40-225 or 40-245, and third year standing.) (Sociology majors: 48-333 and two courses in Communication, Media, and Film.)

40-463. Gender and Technology
This advanced seminar addresses issues related to gendered experiences with technology in the digital age through an examination of various theoretical debates and case studies. Topics may include: the historical gendering of technological skills; the social construction of technology and masculinity; impact of technology on the environment; critiques of techno-science; gendered representation of, and participation in, video games; gendered experiences of mobile phone and social media use. (Prerequisite 40-301 or 40-364)

40-475. Advanced Communication Theory
An examination of contemporary communication theories, such as: critical, cultural, functional, structural, and postmodern approaches. Special attention will be devoted to critically evaluating the underlying assumptions and frameworks of various theories. (Prerequisite: 40-275 and at least Semester 6 standing.)

40-476. Canadian Communication Thought
The course examines a range of thinkers and artists who have contributed to the various branches of communication and media studies in Canada, including media history and criticism, political economy, cultural studies, philosophies of technology, and media and digital arts. Commonalities and differences between first and second-generation Canadian theorists and artists will be discussed in relationship to theories and practices emanating from the United States and overseas. (Prerequisite: at least Semester 6 standing.)

40-489. Selected Topics in Media Production
An advanced exploration of selected topics related to production processes across a variety of media platforms. For individual projects (available only to four-year Honours students in Communication, Media and Film or four-year Honours students in Combined Programs with Communication, Media and Film), proposals must be submitted on appropriate forms and approved, prior to registration, by the Undergraduate Advisor and Head in Communication, Media and Film. This course may be offered as a regular class. (Prerequisites: Portfolio Review and a 70% average in Communication, Media and Film Honours or Combined Honours Programs) (Normally, 40-489 or 40-495 may be taken no more than a total of 2 times combined.)

40-490. Selected Topics in Communication/Media Studies
An advanced seminar that explores selected topics in the field of Communication/Media Studies. Topics and prerequisites may vary depending on the focus of the course. (Prerequisites:will normally require at least Semester 6 standing or permission of instructor.) (May be repeated for credit if the topics are different).

40-495. Directed Reading
Intended for students with special interest in areas not covered in sufficient depth by other courses. (To be taken only with permission of instructor and Department Head or delegate in Communication, Media and Film) (Normally, 40-489 or 40-495 may be taken no more than a total of two times combined.)

40-498. Internship III
Application of communication skills and knowledge in work experience situations. Admission to the course is by consent and is available only to four-year Honours students. The course is graded by the Undergraduate Advisor on the basis of a written report plus other references. (To be undertaken after the successful completion of relevant 300-level courses.) (Prerequisite: Semester 7 standing and approval of Undergraduate Advisor in Communication, Media and Film.)

40-499. Internship IV
(Same description as 40-498.)

DIGITAL JOURNALISM: COURSES

Fall 2015 Undergraduate Calendar

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COMPUTER SCIENCE: COURSES

Not all courses listed below will necessarily be offered every academic year.

All courses listed below are three lecture hours per week or equivalent, unless otherwise stated. In addition, laboratory/tutorial time may be scheduled as required.

Note: Most Computer Science courses require substantial time out of class in writing, correcting, and testing computer programs. Students should be prepared to devote a minimum of three to five hours a week per course to assignment work alone.

60-100. Key Concepts in Computer Science
The objectives of this course are to excite students' interest in computer science and to give students a precise understanding of a number of difficult concepts that are fundamental to modern computer science. Topics may include: data types; induction and recursion; algebraic characterization; syntax; semantics; formal logic; soundness, completeness, and decidability; specification, algorithm, implementation, and determinism; complexity. (Restricted to students registered in programs offered wholly or jointly by Computer Science or by Mathematics and Statistics, or with approval of Computer Science.) (3 lecture hours and 1.5 laboratory hours a week)

60-104. Computer Concepts for End-Users
Introduction to the concepts of operation of a computer system, including hardware and software. Development of conceptual understanding of word processors, databases, spreadsheets, etc., and practical experience with their use. Networking concepts and data communication concepts will be introduced. The Internet will be introduced with students having access to internet resources. Management information systems including the systems development lifecycle will be discussed. Fundamental concepts of algorithm development and programming will be introduced. Hands-on experience with microcomputers as well as a distributed-computing environment will be involved. In addition to lecture time, laboratory/tutorial time may be scheduled as required. (May not be used to fulfill the major requirements of any major or joint major in Computer Science.) (3 lecture hours)

60-106. Programming in C for Beginners
The course is an introduction to programming in C. Two major goals of this course are: teaching a rational approach to program development, and teaching an introduction to ANSI C. The emphasis of this course is on the first goal. This course adapts a library-based approach that emphasizes the principle of abstraction: library and modular development. The five-phase software development method is used to solve problems. Topics of this course include: a brief introduction to Computer Science, introduction to computer hardware, statement forms, iteration, functions, top-down design, basics of modular programming, recursion, arrays, pointers, dynamic data structures, and file processing. (Antirequisite: 60-140.) (Normally may not be taken for credit by students registered in programs offered wholly or jointly by Computer Science.) (3 lecture hours)

60-140. Introduction to Algorithms and Programming I
This course is the first of a two-course sequence designed to introduce students to algorithm design and programming in a high-level language such as C. The main objectives of the course are to develop the ability to identify, understand and design solutions to a wide variety of problems. Topics include: computer system overview, hardware and software, problem solving steps, concepts of variables, constants, data types, algorithmic structure, sequential logic, decisions, loops, modular programming, one-dimensional arrays, text files. If possible, problems like searching/sorting will be addressed. (3 lecture hours and 1.5 laboratory hours a week)

60-141. Introduction to Algorithms and Programming II
This course is the continuation of 60-140 that introduces students to more advanced algorithm design and programming in a high level language such as C. The main objectives of the course are to develop the ability to identify, understand, and design solutions to a wide variety of problems. Topics covered include: multi-

dimensional arrays, pointers, strings, advanced modular programming, records, binary files, recursion, stacks, linked lists and introduction to algorithm analysis. (Prerequisite: 60-100 (or 62-140) and 60-140.) (3 lecture and 1.5 laboratory hours a week).

60-205. Introduction to the Internet
Students will be introduced to the Internet as a global information infrastructure, including the development of early and current communication protocols and services, packaging of data, and data transmission. Fundamental concepts of and tools to support Internet browsing through concepts of Universal Resource locators and Hypertext Markup Languages will be included. Students will be required to publish a website on the Internet using HTML. Web page enhancement through the use of JavaScript and other tools will be introduced. The functionality of electronic mail and bulletin board services will be introduced with hands-on experience in sending and receiving information, automated title searching, and an introduction to organizing information to be accessible over the network. Technical methods of binary data transfer on analog carriers will be introduced and comparison of Ethernet and ATM fibre-optic digital delivery will be discussed. In addition to lecture time, laboratory/ tutorial time may be scheduled as required. (Prerequisite: 60-104 or 60-106 or 60-140.) (May not be used to fulfill the major requirements of any major or joint major in Computer Science.) (3 lecture hours a week)

60-207. Problem Solving and Information on the Internet
Students will be introduced to logic and critical appraisals including reasoning skills and critical thinking in the computer age. Problem solving and heuristics will be discussed including how to solve problems by coming up with the right strategies. Searching using Boolean logic to pinpoint useful and reliable information will be introduced. Methods for being self-critical and critical of web information in order to perform evaluations will be studied. (Prerequisites 60-104 and 60-205.) (This course may not be taken to fulfill the major requirements of any major or joint major in Computer Science.) (3 lecture hours a week.)

60-209. Social Media and Mobile Technology for End Users
This course provides review, analysis and use of social media and mobile technologies such as blogs, Facebook ™, twitter ™, texting, using mobile devices such as laptops, Apple devices, RIM devices, Android devices. Topics to be covered include: a comprehensive review of available social media and mobile technology, use of social media and mobile technology for sharing of knowledge and for group interaction, security and privacy, methods for analyzing end-user requirements for a social media application, and strategies for designing and building a social media application. (This course may not be taken to fulfill the major requirements of any major or joint major in Computer Science.) (3 lecture hours a week.)

60-212. Object-Oriented Programming Using Java
Concepts of classes and objects, Java applications, frames, event handling, control structures, methods, arrays, string manipulations, object-based programming, object-oriented programming - inheritance, polymorphism, interface and abstract classes, anonymous classes, data structures in Java, exception handling, introduction to graphical user interface. (Prerequisite: 60-141.) (3 lecture hours and 1.5 laboratory hours a week)

60-214. Computer Languages, Grammars, and Translators
Pragmatic and theoretical aspects of grammars, recognizers, and translators for computer languages will be discussed. The topics covered will include regular languages and context-free languages, including parsers and parser generators for such languages. Attribute grammars, syntax-directed translation, interpreters and compilers will also be discussed. (Prerequisite:60-100 and 60-212.) (3 lecture hours and 1.5 laboratory hours a week)

60-231. Theoretical Foundations of Computer Science
An introduction to Mathematical Logic, Set Theory, and Graph Theory. Topics include propositional logic, first order logic, proof techniques, mathematical induction, sets, operations on sets, relations, operations on relations, functions, countable and uncountable sets, graph-theoretic concepts, such as graph connectivity, graph isomorphism, trees, Euler graphs. (Restricted to students in Computer Science.) (Prerequisite: 60-100 and 62-190.)(3 lecture hours and 1.5 laboratory hours a week)

60-254. Data Structures and Algorithms
An introduction to the programming and analysis of linear and non-linear internal (main store) data structures and associated algorithms . Topics include the formal

notion of an algorithm, elementary time and space complexity; linear lists (such as stacks, queues, linked structures.); non-linear lists (trees, binary trees); recursion; sorting techniques (such as heap sort, quick sort, merge sort, shell sort.); searching techniques (such as binary search, binary search trees, red-black trees, hashing.); algorithm design paradigms (such as divide-and-conquer, dynamic programming, greedy algorithms); and applications. (Prerequisite: 60-100 and 60-141) (3 lecture hours and 1.5 laboratory hours a week)

60-256. Systems Programming
This course introduces students to advanced software development techniques in system programming using the C language in the UNIX environment. Topics include introduction to modern operating systems, system calls, managing processes, the use of fork and exec, signals, file processing, filters, pipes, scripting languages, introduction to concurrency (e.g. synchronization), network programming (e.g. using sockets), client-server problems. (Prerequisite: 60-141.) (3 lecture hours and 1.5 laboratory hours a week)

60-265. Computer Architecture I: Digital Design
Number systems, switching algebra, logic gates, circuit minimization. Combinational circuits. Read-only memory, random-access memory, programmable logic. Synchronous and asynchronous sequential circuits. Latches, flip-flops, registers, counters, register transfer language. Digital integrated circuits. Hardware description languages. (Prerequisite: 60-140.) (3 lecture hours and 1.5 laboratory hours a week)

60-266. Computer Architecture II: Microprocessor Programming
Data representation, central processing unit, arithmetic logic unit, control unit. Assembly language concepts. Memory segmentation. Programming a typical microprocessor (e.g. Intel 8086 family or Motorola 6800 family). Instruction set architecture- addressing modes and formats, register set. Basic Input/Output devices, Programming I/O operations. Interrupts, disk controllers. (Prerequisite: 60-265).(3 lecture hours and 1.5 laboratory hours a week)

60-270. Advanced Web Design, Construction, and Deployment
This course is intended to teach the student about advanced website creation and to give an understanding of some of the technology behind websites, as well as an understanding of emerging web-related technologies. Topics covered will include JavaScript, Style Sheets, Dynamic HTML, XML, XHTML, Web Browser compatibility issues, and how web servers work. (Prerequisite: 60-205.) (This course may not be taken to fulfill the major requirements of any major or joint major in Computer Science.) (3 lecture hours a week)

60-275. Selected Topics I
Topics may differ from year to year. (Prerequisite: 60-100 or 62-140, and 60-141.) (May be repeated for credit if content changes.) (3 lecture hours or equivalent.)

60-280. Software Development
This is a software development course to advance students' programming skills and to introduce basic software engineering concepts and techniques through practice. Topics for advancing programming skills to be covered include event-driven programming and advanced GUI design, concurrent programming techniques, reflection and inter-process communication. Basic software engineering topics include requirements analysis and design, medium sized project management, and automated software engineering tool development. (Prerequisite: 60-212.) (3 lecture hours and 1.5 laboratory hours a week.)

60-298. Co-op Work Term I
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.)

60-305. Cyber-Ethics
A number of key concerns about social welfare in our cyber age will be explored. Law, morality, public policy, and how these both influence and are influenced by the Internet will be examined. This course will critically appraise issues surrounding, but not limited to, free speech, property rights (especially intellectual property), privacy, security, and artificial intelligence. Issues raised by ethical theorists, policy makers, legal experts, and computer scientists will be analyzed in

this course. (Prerequisites: 60-104 and 60-205.) (This course may not be taken to fulfill the major requirements of any major or joint major in Computer Science.)(3 lecture hours a week)

60-307. Web-Based Data Management
This non-major course is intended to teach students how to design and build interactive data-driven Web sites, by extending their knowledge of relevant programming concepts and techniques introduced in 60-270, and introducing new tools and techniques. Students will learn advanced use of PHP and MySQL to build objects and “glue” them together using protocols such as JSON, code libraries such as AJAX and jQuery, and learn how to incorporate API’s from Web service providers such as Google Maps. (Prerequisite: 60-270). (This course may not be taken to fulfill the major requirements of any major or joint major in Computer Science.) (3 lecture hours a week.)

60-311. Introduction to Software Engineering
This course introduces the fundamental concepts, common principles, and general techniques of software engineering. It discusses the main issues involved in the development life-cycle of nontrivial software systems, including process models, feasibility studies, requirements elicitation and definition, rapid prototyping, design methodologies, verification and validation, and software evolution. Students taking this course are required to work on projects, which are designed to go through the major phases of large-scale software system development. (Prerequisite: 60-212 and 60-254.)(3 lecture hours a week)

60-315. Database Management Systems
This course will acquaint students with the Basic concepts of Database Systems. The topics covered will include 3-level architecture, introduction to file structures: B-trees, B+ Trees and Hashed files, relational model, relational algebra and calculus, SQL, and database design with Normalization Theory. (Prerequisite: 60-254 and 60-256 or 60-265.) (3 lecture hours a week)

60-322. Object-Oriented Software Analysis and Design
This course builds on the knowledge of object-oriented programming, data structures, systems programming .Students are introduced to object-oriented software analysis and design concepts (such as cohesion and coupling), and design practices currently used in industry , (such as design patterns and refactoring). These concepts and practices will be discussed through case studies and programming exercises.(Prerequisite: 60-212 and 60-254)(3 lecture hours a week)

60-330. Operating Systems Fundamentals
Operating system services, introduction to primary components of multi-programming operating systems, CPU scheduling, concurrent processes, process synchronization and interprocess communication, deadlocks, memory management, file systems, virtual memory, disk scheduling. (Prerequisite: 60-212, 60-254, 60-256, and 60-265 or 60-266.)(3 lecture hours a week)

60-334. World Wide Web Information Systems Development
This course is designed for people who want to make their data available to others over the Internet. Topics will include WWW authoring, WWW site planning, executable programs that create dynamic documents, the client-server model, multi-tier WWW software architecture, and security aspects. (Prerequisite: 60-212 and 60-254.) (3 lecture hours a week)

60-340. Advanced Object Oriented System Design Using C++
The main objective of this course is to explore advanced topics of the object oriented paradigm through the use of the C++ programming language. Topics covered include: advanced object oriented design, the use of abstraction to manage complexity, objects and classes, inheritance and class hierarchies, multiple inheritance, operator and method overloading, namespaces and visibility, templates, dynamic binding and virtual functions, exception handling, multi-threading and C++ standard library. In addition, the course will include a practical project, solving a real-life problem, implemented in C++, involving the client/server methodology, and an interface to a database using a graphics toolkit. (Prerequisites: 60-212, 60-256.) (3 lecture hours a week)

60-350. Introduction to Multimedia Systems
This course provides the student with basic concepts and techniques used in multimedia systems. Topics include: components of multimedia systems (text, audio, and video), media formats and standards, data compression techniques, hypermedia techniques, and authoring tools. (Prerequisite: 60-254 and 60-265.) (3 lecture hours a week)

60-352. Introduction to Computer Graphics
An introduction to computer graphics hardware and software, interfaces, standards, programming libraries, fundamental algorithms, rendering techniques, and algorithms for 2D and 3D applications. Substantial programming work is vital to this course. (Prerequisite: 60-254 and 62-120.) (3 lecture hours a week)

60-354. Theory of Computation
Finite Automata, regular expressions and languages; properties of regular languages; context-free grammars and languages; pushdown automata; properties of context-free languages. Introduction to Turing machines; recursive functions; undecidability. (Prerequisites: 60-214, 60-231 and 60-254.) (3 lecture hours a week)

60-367. Computer Networks
This course is an introduction to computer networks and their protocols. Topics include: network architectures, transport, routing, and data link protocols, addressing, local area networks, flow and congestion control, and network security. Examples will be drawn primarily from the Internet (e.g. TCP, UDP, IP) protocol suite. (Prerequisite: 60-212, 60-254, 60-256 and 60-265. Recommended corequisite: 60-330.)

60-368. Network Practicum
This course will acquaint the students with practical details of network software and hardware. Topics will include design, setup, configuration and implementation of various network functions. (Prerequisite: 60-330 and 60-367.) (3 lecture hours and 1.5 lab hours a week.)

60-371. Artificial Intelligence Concepts
This course covers fundamental concepts in Artificial Intelligence. Topics include informed and uninformed search, problem solving using propositional and first-order logics, knowledge representation and reasoning, plausible and uncertain reasoning, machine learning, ethical implications. An overview of some applied Artificial Intelligence such as natural language processing, planning and agent systems will be included. (Prerequisites:60-254 and (65-205 or 65-250) (3 lecture hours a week)

60-375. Selected Topics
Topics may differ from year to year. (Prerequisite: 60-212, 60-254, and 60-256. Additional courses may be required depending upon the subject.) (May be repeated for credit if content changes.)(3 lecture hours or equivalent a week)

60-376. Selected Topics
Topics may differ from year to year. (Prerequisite: 60-212, 60-254, and 60-256. Additional courses may be required depending upon the subject.) (May be repeated for credit if content changes.)(3 lecture hours or equivalent a week)

60-377. Game Design, Development and Tools
This course introduces professional game design and development tools. Students will become proficient in the use of a commercial grade game engine (e.g., Unity3D) and associated scripting/programming languages (e.g., C#) through programming intensive hands-on assignments. Topics may include game design and development concepts such as game objects and game components, game physics and collision handling, basic artificial intelligence, 2D and 3D graphics, textures and shaders, sprite animation, 3D animation, and audio. (Prerequisites: 60:254, 60-212.) (3 lecture hours a week)

60-398. Co-op Work Term II
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course cannot continue in the co-op program.)

60-411. Software Verification and Testing
This course covers fundamental concepts and techniques for software verification and testing. The students will learn through practice the testing process, automated software testing tools, and various test models together with the related test coverage criteria. (Prerequisites: 60-311 and 60-330.) (3 lecture hours a week)

60-415. Advanced and Practical Database Systems
This course covers both advanced theoretical database materials as well as specific database application development tools needed in the industry. The course completes database design and theory initiated in 60-315 and then adds database application development languages. Students will be exposed to the running environments (e.g., their compilers) and applying these on the database theory and design of the first part to develop full application. (Prerequisites: 60-315 and 60-330.)
(3 lecture hours a week)

60-420. Mobile Application Development
Students taking this course will learn how to create a mobile application for the Android platform. The topics covered will include: use of the mobile application development environment, specification of the requirements for a mobile application, design and implementation of the end-user interface, managing data in a mobile application environment, interfacing with data and programs residing on remote servers, creation of object-oriented programs to implement the mobile application, use of libraries and third-party software resources, deployment of a mobile application so that it is available to the public, and documentation, including creation of end-user instructions, and design/program documentation.Students will work individually, and will develop a mobile application that has been approved by the instructor of the course. (Prerequisites: 60-315, 60-322.) (3 lecture hours a week.)

60-422. Agile Software Development
This project-oriented course is designed to give students experience in developing projects using Agile software development process. The course will discuss principles of Agile methods for software development, with a concentration on the eXtreme Programming methodology, and will teach concepts related to its practices. Topics will include software and user interface design, build and development tools, data persistence, and proper software testing. Projects will involve the creation of industry-oriented software (e.g. in Java), and will expose participants to tools commonly used in industry. (Prerequisite: 60-322.)(3 lecture hours a week).

60-425. Oracle Database Design and Administration
This course is a practice-oriented course which follows the database course 60-415. The emphasis is on the tasks performed by a Data Base Administrator (DBA). The course will use the Oracle Database system to exemplify implementation of concepts. Students will learn how to install Oracle software, design a relational database system (using normalization) and implement it in Oracle, create user accounts and set privileges, implement appropriate security protocols, and design and implement appropriate backup procedures. (Prerequisite: 60-315) (1.5 lecture hours and 1.5 laboratory hours a week).

60-440. Principles of Programming Languages
Basic concepts of programming languages. Comparative study of the major programming paradigms, including imperative, object-oriented, functional, logic, and concurrent programming. Principles of programming language design and evaluation. Syntax, semantics and implementation techniques of programming languages. (Prerequisite: 60-214, 60-231 and 60-254.) (Restricted to Computer Science students) (3 lecture hours a week)

60-450. Multimedia System Development
The aim of this course is to discuss and learn technologies for the development of multimedia application, modeling and development of standalone and/or, networked multimedia systems, and computer generated 3D animation. (Prerequisite: 60-350 or consent of instructor.) (3 lecture hours a week)

60-454. Design and Analysis of Computer Algorithms
The intent of this course is to introduce the fundamental techniques in the design and analysis of computer algorithms. Topics include: asymptotic bounds, advanced data structures, searching, sorting, order statistics, oracle arguments, divide-and-conquer, greedy algorithms, dynamic programming, graph algorithms, NP completeness, and approximation algorithms. (Prerequisite: 60-231, 60-254 and 60-354.) (Restricted to Semester 7 and semester 8 students in Computer Science.)
(3 lecture hours a week)

60-460. Digital Design and Computer Architecture
Modular design concepts in digital circuits. Interfacing facilities. Memory Organization. Architecture classification schemes. Parallel computing architectures. Pipelining and vector processing. Alternate architectures and

performance enhancement. (Restricted to Computer Science students) (Prerequisite:60-265 or 60-266, 60-330 and 60-367.) (3 lecture hours a week)

60-467. Network Security
This course will introduce students to advanced topics in network security. Topics will include encryption and authentication techniques, detection and analysis of intrusions, and the security of electronic mail and web access. (Restricted to Computer Science students) (Prerequisites: 60-367.) (3 lecture hours a week)

60-468. Advanced Networking
The course will introduce students to advanced topics in networking. (Restricted to Computer Science Students) (Prerequisites: 60-367 and 60-368.)

60-470. Project Using Selected Tools
Students will complete a project using an advanced computing tool, such as a database package, simulation software, speech-recognition hardware module, etc. Students are required to submit a report describing the project and demonstrating mastery of the tool. Tools and the project are chosen by the student with the approval of the instructor. (Restricted to Computer Science Students) (Prerequisite: 60-315, 60-322, and 60-330.) (3 lecture hours or equivalent a week)

60-473. Advanced Topics in Artificial Intelligence I
The course will introduce students to advanced topics in Artificial Intelligence. (Restricted to Honours Computer Science students) (Prerequisite: 60-371.) (3 lecture hours a week)

60-474. Advanced Topics in Artificial Intelligence II
The course will introduce students to advanced topics in Artificial Intelligence. (Restricted to Honours Computer Science students.) (Prerequisite: 60-371.) (3 lecture hours a week)

60-475. Selected Topics
In many cases the topics will coincide with a graduate course offering in a given year, and students will be required to complete the lecture component of that graduate course. Topics may include: advanced database management, graphics, artificial intelligence, information retrieval, theory of computation, functional programming, knowledge base systems, and foundations of programming languages. (Restricted to Semester 7 and Semester 8 students in Computer Science with permission of the instructor.) (May be repeated for credit if content changes.) (3 lecture hours or equivalent a week)

60-476. Selected Topics
In many cases the topics will coincide with a graduate course offering in a given year, and students will be required to complete the lecture component of that graduate course. Topics may include: advanced database management, graphics, artificial intelligence, information retrieval, theory of computation, functional programming, knowledge base systems, and foundations of programming languages. (Restricted to Semester 7 and Semester 8 students in Computer Science with permission of the instructor.) (May be repeated for credit if content changes.) (3 lecture hours or equivalent a week)

60-477. Artificial Intelligence for Games
This course provides students with an opportunity to explore theoretical and practical aspects of Artificial Intelligence for computer games. Topics may include agents, sensory systems, steering behaviours, pathfinding, decision making, planning, goal-oriented behaviour, multi-agents (groups, crowds) and learning. (This course could be used to satisfy the 60-473 (fourth year AI) requirement.) (Prerequisite: 60-377.) (Restricted to students in Honours Computer Science.) (3 lecture hours a week)

60-480. Selected Topics in Software Engineering
This course intends to connect emerging technologies with the student's theoretical background in Computer Science related to Software Engineering concepts and techniques. Selected application domains include protocol security, web systems and distributed object systems and the theories involved include graph theory, set theory, automata and compiler theory. (Prerequisite: 60-311, 60-322 and 60-330.) (Restricted to Computer Science Students). (3 lecture hours a week)

60-496. Research Project
This course consists of two components: a) development of research skills, and b) development of technical writing and project presentation skills. This course requires students to complete a research project in some area of Computer

Science under the supervision of a faculty member. The course will typically involve the development of some software or the design and/or implementation of some algorithm. Each student will be required to submit a project report and give one or more seminars on the research project. (a 6 credit course restricted to Semester 7 or Semester 8 students in BCS (Honours) or B.Sc. (Honours Computer Science with Software Engineering Specialization) with a major average of 8.0 or better). (Anti-requisite 60-499)(3 lecture hours or equivalent a week, for two terms

60-497. Co-op Work Term III
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course cannot continue in the co-op program.)

60-498. Co-op Work Term IV
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course cannot continue in the co-op program.)

60-499. Project Management: Techniques and Tools
This course requires students to complete an application development project in some area of Computer Science under the supervision of a faculty member. The course will typically involve the development of some software or the design and/or implementation of some algorithm. Each student will be required to submit a project report and give one or more seminars on the system development project. (a 6 credit course restricted to Semester 7 or Semester 8 students in Computer Science.) (Antirequisite: 60-496.) (3 lecture hours or equivalent a week, for two terms.

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DIASPORA: COURSES

35-170. Introduction to Diaspora Studies: There's No Place Like Home
This course introduces students to diasporas-scattered populations living in exile from their ancestral homelands. The course focuses on the significance of migration, exile, belonging, and nostalgia (for ancestral homelands) for diasporas throughout the world. Students submit projects (incorporating oral histories, for example) on the diaspora of their choice. (Also offered as Political Science 45-170 and Languages, Literatures and Cultures 06-170)

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INTERFACULTY PROGRAMS (14-30-XXX)

DIGITAL JOURNALISM: COURSES

30-120. Reporting Fundamentals
Through lessons, labs, case studies, group work, and writing and presentation assignments, students learn the fundamental principles and practices of daily and special assignment and reporting. A classroom-based curriculum taught by professional journalists, “Reporting Fundamentals” complements the hands-on design of the collaborative studios. **(**Enrolment initially restricted to Digital Journalism majors.)

30-125. Journalism Today
This fundamental theory unit of the Digital Journalism curriculum introduces students to the history of journalism and the function of journalists in contemporary society. This unit emphasizes the distinction of Digital Journalism from traditional forms. An overview of the major themes, issues and schools of thought informing the field of media studies, “Journalism Today” addresses such topics as: the political, economic, historical, and cultural contexts of communication; policy issues and concerns; communication technology; media representation; the role of media in the social construction of reality; and the broad interaction between journalism and society. **(**Enrolment initially restricted to Digital Journalism majors.)

30-140. The Job - Collaborative Studio I
From their first day in DJ at the University of Windsor students think and act as journalists. In “The Job” students each week identify, propose, research and prepare stories with full-time journalists as their mentors. In this collaborative studio course, students work together to solve problems in a flexible learning environment emphasizing realistic on-the-street experiences such as attending trials, news conferences, and public events. (Prerequisites: 30-125.) **(**Enrolment initially restricted to Digital Journalism majors.)

30-220. Introduction to Online Design and Publishing
This unit concentrates on applying digitally generated content on the web. Here students will learn computer language and software used to build sites and, once the site is built, layer, insert hypertext links, prepare and post clickable maps, historical timelines, photo galleries/slide shows, etc., and their own journalistic projects. **(**Enrolment initially restricted to Digital Journalism majors.)

30-222. Introduction to Audio/Visual production
This fundamental production unit is organized around weekly assignments establishing students’ competency in use of audio and video equipment, editing and photojournalism. With an emphasis on electronic news gathering (ENG) the objective is to ensure that all Digital Journalism students have the same basic technical skill set. Students with a particular interest in A/V production can select electives to broaden their competencies in this area and develop a specialization applicable in “Newsroom” and “Professional Studio”. **(**Enrolment initially restricted to Digital Journalism majors.)

30-225. Media Law and Ethics
Traditional standards of law and ethics are being re-evaluated as journalists increasingly work in a digital milieu. This unit establishes students’ understanding of the law and ethical issues surrounding matters such as defamation, restrictions on identifying suspects in criminal cases, and intellectual property. **(**Enrolment initially restricted to Digital Journalism majors.)

30-230. Writing for Digital Journalism
Strong writing is the cornerstone of a successful journalism career. In this unit students learn the principles of writing news for mainstream and alternative digital media. They apply these principles in the research and preparation of assignments designed to instill clarity, precision and speed. **(**Enrolment initially restricted to Digital Journalism majors.)

30-240. Advanced Skills - Collaborative Studio II
In “Advanced Skills” – Collaborative Studio II Digital Journalism students work the field. Each week under the direction of a professional journalist they apply the advanced technical and academic skills acquired in the previous three semesters to develop original independent and collaborative projects suitable for presentation

in multiple digital formats. (Prerequisite: 30-140.) **(**Enrolment initially restricted to Digital Journalism majors.)

30-320. Computer-Assisted Reporting
Digital technology has not only changed journalists' physical work, it has also changed their intellectual work. In this course Digital Journalism students learn the practices of computer-assisted reporting (CAR), a broad area of investigative reporting that is premised on using a variety of techniques to acquire digital data and information and use it in journalism. **(**Enrolment initially restricted to Digital Journalism majors.)

30-340. Newsroom - Collaborative Studio III
In their third year DJ students run the newsroom; they organize a management structure and select, research and report the stories that appear on the University of Windsor's Digital Journalism website. This two-semester two-credit course requires students to complete a minimum number of stories during the year for the DJ program website, other campus media, local public outlets, community platforms, and/or university units and programs. As with other studio courses, professional journalists guide and evaluate students in this studio. (Prerequisites: 30-240.) **(**Enrolment initially restricted to Digital Journalism majors.)

30-440. Professional Studio - Collaborative Studio IV
The "Professional Studio" is built around a two-semester capstone project. Students advancing to fourth year pitch a single or a multi-part project to faculty and professional journalists who monitor progress and evaluate through e-portfolios. DJ project pitches vary because not all journalists want to report; some want to develop technical specializations, some want to produce, some want to only research. Common to all capstone projects is students' emphasis on an aspect of their interests in their co-major designation. (Prerequisites: 30-340.) **(**Enrolment initially restricted to Digital Journalism majors.)

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DISABILITY STUDIES: COURSES

37-301. Theories of Disability and the Social Model
This course explores the meaning of disability and deepens students' understanding of the experience of living with a disability in today's society. It introduces students to various approaches to disability and explores alternate perspectives of disability, while emphasizing the social model of disability. It critically examines assumptions that have shaped traditional service and responses to people with disabilities. It explores how to understand disability from the perspective of difference rather than deficit. It encourages new ways of thinking about how to accommodate people with disabilities. This course focuses on disability as a social construct and people with disabilities as a minority group. (Prerequisite: Admission to Disability Studies program.)

37-302. Historical Approaches to People with Disabilities
This course will select national and international milestones highlighting people, events, and legislation that have affected disability rights. It will include historical discussions about significant dates related to the eugenics movement, the civil rights movement, the self-help movement, deinstitutionalization, demedicalization, and consumerism. Emphasis will be placed upon Canadian history with comparison with historical developments in other countries. This course will expose current issues, controversies, and trends in disability and teach students how to interpret historical documents, court cases, media reports, and other materials. It will use case studies to analyze the ideological, socioeconomic, and political history of disability. (Prerequisite: 37-301)

37-401. Community Approaches, Advocacy and Empowerment
Students will critically review traditional approaches to professional practice with people with disabilities, with special attention to the role of the professional. Using case studies, students will explore professional intervention strategies that promote full participation and equality for people with disabilities. Other themes include self-determination and choice, supporting disability rights and self-advocacy organizations, and building alliances. Recognizing how important family is to many people with disabilities, this course will also explore the implications of the views and experiences of family members. Stressing the need for empowerment, this course introduces students to social change movements as led by people in search of full citizenship who have disabilities. The implications for empowerment, created by the advent of new technologies, is also explored. (Prerequisite: 37-302)

37-402. Service Delivery Systems and Independent Living
This course helps the student understand how to put the social model of disability into practice. It will encourage students to analyze power, inequality and influence and then to build strategies for actions. It will promote a team-oriented approach by using case studies to examine the issues of access and related policies and practices that support or impede inclusion. Theoretical and practical approaches draw from the perspective that people supported by human services need opportunities to lead dignified lives with the means to exercise greater personal choice, control and independence. The Independent Living model and organization exposes students to multiple issues that involve the actions of consumer leaders, activists and managers in designing, organizing and changing services and support models for people with disabilities. This course considers how people with disabilities access societal and community resources, engage socially, and take part in policy development and implementation. (Prerequisite: 37-401)

37-461. Community Practice
This four course equivalent sequence is a field placement, designed to enable students to apply and integrate the various theoretical perspectives and themes explored in the Disability Studies program. Students will work with people with disabilities in community agencies and programs and develop respectful and empowering professional skills. Students will also have the. opportunity to gain knowledge of an issue or area of specific interest. Students will acquire knowledge of the needs and issues relevant to at least one disability group. (Prerequisite: 37-301, 37-302: Semester 7 standing in Disability Studies Program) (Co-requisites: 37-401, 37-402).

37-465. Community Orientation to Disability Issues

This two course equivalent sequence is a field placement, designed to enable students to apply and integrate the various theoretical perspectives and themes explored in the Disability Studies program through implementation of a community based project. Students will work with people with disabilities in community agencies and programs and develop respectful and empowering professional skills. Students will also have the opportunity to gain knowledge of an issue or area of specific interest. This will necessitate the development of an individual or group project of interest and importance to the organization involved**.(**Prerequisite: 37-301, 37-302: Semester 7 standing in Disability Studies Program)(Co-requisites: 37-401, 37-402).(Anti-requisite: 37-461) (Winter 2012: Offered as Pass/Non-Pass.)

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DISABILITY STUDIES

Disability-Studies Emphasis Courses

Disability-Studies-Emphasis Courses
Program requirements in Disability Studies make reference to Disability Studies-Emphasis courses. These currently include: General Arts: 01-204, 01-209; Music: 32-120, 32-121, 32-330, 32-420; Philosophy: 34-129; Psychology: 46-333, 46-256, 46-322, 46-323, 46-334, 46-228*, 46-427, 46-445; Social Justice Studies: 38-321; Social Work: 47-204, 47-303, 47-346, 47-356, 47-410; Women's Studies: 53-201*; Nursing: 63-241, 63-245, 63-351.

**Non-Disability Studies prerequisite course required.*

Various areas of study from time to time may offer courses dealing specifically with disability studies under specific course titles or general titles such as "Special Topics," "Directed Readings," or "Seminars." Information regarding such courses will be available from the Disability Studies Program Coordinator. These courses may be taken with permission of the Disability Studies Program Coordinator.

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DISABILITY- STUDIES: COURSES

PSYCHOLOGY: PROGRAMS
PSYCHOLOGY: COURSES

SOCIAL WORK: PROGRAMS
SOCIAL WORK: COURSES

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DRAMATIC ART: COURSES

Not all courses listed will necessarily be offered each year. Courses are three hours a week (3.00 credit hours) unless otherwise indicated.

24-100. The Nature of Theatre I
Introduction to the Process of Theatre. Two of the following topics will be covered: the analysis of the play script; the mechanics of performance; the principles of direction; and the theories of design/technical theatre. Nature of Theatre is a two-part sequence, required for majors in all School of Dramatic Art programs. A laboratory assignment supporting the production schedule of University Players is required for either 24-100 or 24-200. Three critical writing assignments are required for the term in which a laboratory is not taken. This course must be successfully completed in the first year of the program. (Laboratory hours by arrangement).

24-111. Theatre in Contemporary Culture
An examination of factors and principles involved in an audience's appreciation of theatre. (No prerequisite.) (Open to non-Dramatic Art majors.)

24-117. Drawing for the Theatre
Introductory course confronting challenges in drawing for the theatre. Areas covered will include common and innovative materials, elementary drafting, perspective, contour drawing and shading, and their computer enhancement. (Restricted to Dramatic Art majors.)

24-118. Rendering for the Theatre
Introductory course confronting challenges in creating colourized renderings for the theatre. Areas covered will include common and innovative materials, colour theory and psychology, script and character analysis, textural creation, sheen, reflections, and their computer enhancement. (Pre-requisite: 24-117) (Restricted to Dramatic Art majors.)

24-120. Voice for the Actor I
An introduction to the study and practice of voice and speech for the theatre. (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-121. Voice for the Actor II
Continuation of 24-120. The study and practice of voice and speech for the theatre. (Restricted to B.F.A. Acting students only.) (Prerequisite: 24-120.) (Laboratory hours by arrangement.)

24-126. Movement for the Actor I
An introduction to the study and practice of movement for the actor. (3.0 credit hours) (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-127. Movement for the Actor II
Continuation of 24-126. The study and practice of movement for the actor. (Prerequisite: 24-126.) (3.0 credit hours.) (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-128. Improvisation and Introduction to Acting for the Theatre I
An introduction to the study and practice of acting with an emphasis on the basic elements of improvisation. (3.0 credit hours.) (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-129. Improvisation and Introduction to Acting for the Theatre II
Continuation of 24-128. The study and practice of basic elements of acting and improvisation (Prerequisite: 24-128.) (3.0 credit hours.) (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-130. Theatre History I
Critical approaches to the main elements of Greek and Roman theatre, medieval western and Asian theatre, Italian, Spanish, and English Renaissance Theatre. (Open to non-Dramatic Art majors.)

24-160. Introduction to Drama in Education and Community I
An introduction to the principles, theories and applications of Drama in Education

and Community with an emphasis on creativity, storytelling, and the developmental aspects of play. (Restricted to Drama in Education and Community Majors, or consent of instructor.)

24-161. Introduction to Drama in Education and Community II
A continuing study of Drama in Education and Community. (Prerequisite: 24-160 or consent of instructor.) (Restricted to Drama in Education and Community Majors, or consent of instructor.)

24-200. The Nature of Theatre II
Continuation of 24-100. Two topics not covered in 24-100 will be covered in 24-200. Nature of Theatre is a two-part sequence, required for majors in all School of Dramatic Art programs. A laboratory assignment supporting the production schedule of University Players is required for either 24-100 or 24-200. Three critical writing assignments are required for the term in which a laboratory is not taken. This course must be successfully completed in the first year of the program. (Laboratory hours by arrangement).

24-210. Speech Communication to Inform
A beginning course designed to help the student to develop poise and confidence in communicating information. (Two lecture and one lab hours per week.) (Not available on an Audit basis.) (Also offered as 40-210).

24-211. Scenic Design I
Introduction to the technical aspects of design for the stage; communicating the design idea through basic drafting techniques. (Prerequisite: 24-118, or consent of instructor.)

24-213. Scene Painting for the Theatre
Laboratory and demonstration course with an emphasis on materials, texturing techniques, and the creation of three-dimensional effects.

24-214. Computer Technology for the Theatre
This course is an introduction to the use of computers for the theatre. Content and approaches will vary according to the nature of software programs. This course may be taken more than once for credit provided the content is significantly varied. (Open to Non-Drama Majors with consent of the instructor.)

24-215. Lighting Design I
The introduction and application of basic principles, including electricity, instruments, and design theory. (Laboratory hours by arrangement.)

24-216. Stage Lighting II
Continuation of 24-215, with particular emphasis on expanded technologies and lighting for non-proscenium formats. (Prerequisite: 24-215, or consent of the instructor.)

24-217. Costume Design
Introduction to the principles of costume design for the stage; character analysis; and costume rendering. (Prerequisite: 24-117 and 24-118 or consent of instructor).

24-220. Voice for the Actor III
Continuation of 24-121. The study and practice of voice and speech for the theatre. (Prerequisite: 24-121.) (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-221. Voice for the Actor IV
Continuation of 24-220. The study and practice of voice and speech for the theatre. (Prerequisite: 24-220.) (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-223. Acting for the Theatre I
Continuation of 24-129. The emphasis will be on acting exercises, script analysis and scene work. (Prerequisite: 24-129.) (Restricted to B.F.A. Acting students only.) (May be taken twice with the consent of instructor if assignments or their treatments are significantly varied.)

24-224. Acting for the Theatre II
Continuation of 24-223. The emphasis will be on the analysis and performance of scenes from plays. (Prerequisite: 24-223.) (Restricted to B.F.A. Acting students only.) (May be taken twice with the consent of instructor if assignments or their treatments are significantly varied.)

24-225. Introductory Acting I

A practical study of the fundamentals of acting experienced through acting exercises. (Not open to B.F.A. Acting students.)(Open to students enrolled in semester 3 and subsequent semesters of study.)

24-226. Movement for the Actor III
Continuation of 24-127. The study and practice of movement for the actor. (Prerequisite: 24-127.) (3.0 credit hours.) (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-227. Movement for the Actor IV
Continuation of 24-226. The study and practice of movement for the actor. (Prerequisite: 24-226.) (3.0 credit hours.) (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-228. Psychophysical Acting Techniques
Exercises in improvisation designed to support the rehearsal process for scripted works (Prerequisite: 24-129. Co-requisite: 24-223 or 24-224.) (Restricted to BFA Acting majors only.) (Laboratory hours by arrangement.)

24-229. Dance for the Theatre
A practical course in a variety of dance styles for the theatre.(Not open to B.F.A. Acting Majors except by consent of instructor.) (Laboratory hours by arrangement.)

24-230. Theatre History II
Critical approaches to the main elements of theatre of the seventeenth, eighteenth, and nineteenth centuries. (Open to non-Dramatic Art majors.)

24-235. Introductory Acting II
Emphasis is on acting exercises based on script analysis. (Prerequisite: 24-225, or consent of instructor.) (Not open to B.F. A. Acting students.)

24-244. Directing I
An examination of the principles of play direction, including the role of the director, choosing plays, casting, analysis, picturization and composition, rehearsal techniques, and scene presentation. (Prerequisite: 24-225, or consent of instructor.) (Laboratory hours by arrangement.)

24-250. Stage Makeup
An introduction to the theory and practice of theatrical makeup application. Topics covered will include basic stage makeup, corrective makeup and aging. (Restricted to Drama majors only.)

24-260. Drama in the Classroom: Principles and Theories
A course in the use of drama as it relates to the school curriculum and the community. (Prerequisite: 24-161.) (Restricted to Drama in Education and Community students only.)

24-261. Drama in the Classroom: Applications I
Applications of drama as they relate to the curriculum for Grades K through Six. Completion of a classroom contact is required. (Field contacts are with the consent of Drama in Education and Community instructors and may be outside class time.) (Prerequisite: 24-260 or consent of instructor.) (Restricted to Drama in Education and Community students only.)

24-267. Drama and Community: Principles and Theories
A practical introduction to principles, theories, and applications of drama and theatre techniques to promote and maintain health and well-being for individuals and communities. Focus will be on developing skills in leadership and facilitation in a wide range of community settings. (Prerequisite: 24-161 or consent of instructor.) (Credit cannot be obtained for both 24-377 and 24-267.)

24-270. Speaking Truth to Power: Voice and Activism
An examination of contemporary struggles for social change with a particular focus on anti-consumerist and environmental justice campaigns. Students learn to create persuasive social justice messages. (Prerequisite: Semester 3 or above standing.) (Also offered as Labour Studies 54-270 and Communication, Media and Film 40-270)

24-272. The Creative Process
An introduction to the creative process through an exploration of various theories, principles, and techniques of selected theorists and innovative thinkers. Students may explore such topics as: Creative Problem Solving, Idea Generation, and Innovation. Through academic study and practical work, students will explore

ways of developing their own creative potential and applying it to their daily lives. (Not open to 1st year students.)

24-275. Principles and Practices of Arts Management I
Structures and functions of arts organizations. Examination of core competencies as applied to arts organizations: marketing and publicity, financial management, various forms of fund-raising, board and volunteer management, and interaction with Unions and Associations. (Credit may not be obtained for both 24-275 and 01-360.)

24-276. Principles and Practices of Arts Management II
A continuation of the study of Arts Management I. An exploration of the concepts and practices of organizational design, human resources, leadership, legal concerns, strategic planning, Board governance, policy making and advocacy relating to management of the not for profit and non-profit Arts sectors in Canada today. (Prerequisite: 24-275)

24-277. Improvisation and Self Development
Involves the development of performance skills through a practical application of theatre games and basic elements of improvisation with emphasis on self-development. (Prerequisite: 24-100 and 24-200; or 24-161 or consent of instructor.) (Individual course sections may be restricted to Drama in Education and Community students only.)

24-278. Improvisation: Working with Text
A continuation of the study of improvisation. Involves practical applications of improvisation to improvised scenes and written texts. (Prerequisite: 24-277 or consent of instructor.) (Individual course sections may be restricted to Drama in Education and Community students only.)

24-284. Creative Movement and Voice I
The study and practice of movement and voice as they relate to the individual, theatre, and the classroom. Emphasis may be on one or both disciplines as necessary. (Prerequisite: 24-100 or consent of instructor.) (Laboratory hours by arrangement.)

24-310. Readers' Theatre
A study of the principles and techniques involved in script-in-hand acting and of dramatic play-reading. (Prerequisite: 24-225 or 24-277.)

24-311. Scenic Design II
Problems related to the designing of a multi-set production; communicating the design idea through the use of drafting, models, and colour renderings. (Prerequisite: 24-211, or consent of instructor.)

24-315. Stage Management
A study of the role of the theatrical stage manager. Particular emphasis will be given to rehearsal organization and communication, cue notation, crew supervision, safety issues, Canadian Actors' Equity guidelines, and managing the production while in technical/dress rehearsals and performance. (Prerequisite: 24-200, or consent of the instructor.)

24-317. Costume Design II
Continuation of 24-217, involving theoretical and practical design projects; formal presentation of costume designs. (Prerequisite: 24-217, or consent of the instructor.)

24-319. Studies in Design
Designed for the advanced student who wishes to explore further studies in scenic, lighting, or costume design. (Prerequisite: consent of a faculty advisor.) (May be repeated for credit if assignments or their treatments are significantly varied.)

24-321. Acting-Work in Progress I
Rehearsal project in a performance style selected by Dramatic Art. The play or scenes from plays become the catalyst for the discovery of the style related to its period. (Prerequisite: 24-224.) (Restricted to B.F.A. Acting students only.) (May be repeated for credit if assignments or their treatments are significantly varied.)

24-322. Acting-Work in Progress II
Rehearsal project in a performance style selected by Dramatic Art. The play or scenes from plays become the catalyst for the discovery of the style related to its period. (Prerequisite: 24-224.) (Restricted to B.F.A. Acting students only.) (May be repeated for credit if assignments or their treatments are significantly varied.)

24-323. Acting-Work in Progress III
Rehearsal project in a performance style selected by Dramatic Art. The play or scenes from plays become the catalyst for the discovery of the style related to its period. (Prerequisite: 24-224.) (Restricted to B.F.A. Acting students only.) (May be repeated for credit if assignments or their treatments are significantly varied.)

24-324. Acting-Work in Progress IV
Rehearsal project in a performance style selected by Dramatic Art. The play or scenes from plays become the catalyst for the discovery of the style related to its period. (Prerequisite: 24-224.) (Restricted to B.F.A. Acting students only.) (May be repeated for credit if assignments or their treatments are significantly varied.)

24-325. Intermediate Acting III
Emphasis is on the development of situation and characterization. The period to be studied may vary from year to year. (Prerequisite: 24-235 or consent of instructor.) (Not open to B.F.A. Acting students.)

24-326. Voice and Movement for the Actor I
Application of voice and movement techniques as they relate to performance assignments. Emphasis may be on one or both disciplines as necessary. (Prerequisite: 24-227.) (3.0 credit hours.) (May be taken twice for credit.) (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-327. Voice and Movement for the Actor II
Advanced application of voice and movement techniques as they relate to performance assignments. Emphasis may be on one or both disciplines as necessary. (Prerequisite: 24-221.) (3.0 credit hours.) (Restricted to B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-330. Theatre from the Twentieth Century to the Present Day
Critical approaches to major theatrical movements and experiments in theatre during the twentieth and twenty-first centuries. (Open to non-Dramatic Art majors.)

24-333. Canadian Theatre History
A study of the evolution of theatre in Canada. (Also offered as women's Studies 53-335) (Open to non-Dramatic Art majors.)

24-344. Directing II
A practical course involving rehearsal techniques and the presentation of scenes or one-act plays. (Prerequisite: 24-223 and 24-224; or 24-244 or consent of instructor.) (Laboratory hours by arrangement.)

24-351. Production Problems
Advanced explorations of current trends, materials, or practices in performance or non-performance, with an emphasis on problem solving techniques. The student will research and develop solutions to one or more production problems and present his/her findings in a seminar or performance situation. (Prerequisite: A minimum of two courses and/or equivalent experience in the subject area(s) explored and, consent of a faculty advisor and Director of the School.) (Hours by arrangement.) (May be repeated for credit if assignments or their treatments are significantly varied.)

24-352. Production Problems
Advanced explorations of current trends, materials, or practices in performance or non-performance, with an emphasis on problem solving techniques. The student will research and develop solutions to one or more production problems and present his/her findings in a seminar or performance situation. (Prerequisite: A minimum of two courses and/or equivalent experience in the subject area(s) explored and, consent of a faculty advisor and the Director of the School.) (May be repeated for credit if assignments or their treatments are significantly varied.) (Hours by arrangement.)

24-353. Production Problems: Stage Management
A theoretical and practical course examining the duties and responsibilities of the theatrical stage manager, including rehearsal procedures, protocol and etiquette, assembling the production script, cuing methods and notations, and security/safety regulations. (Prerequisite: 24-315 plus previous experience as an assistant stage manager and consent of a faculty advisor.) (May be repeated for credit if assignments or their treatments are significantly varied.) (Laboratory hours by arrangement.)

24-360. Drama in the Classroom: Applications II
Applications of drama as they relate to the curriculum for Grades Seven through

Twelve. Completion of a classroom contact is required. (Field contacts are with the consent of Drama in Education and Community instructors and may be outside class time.) (Prerequisite: 24-261 or consent of instructor.) (Restricted to Drama in Education and Community students only.)

24-371. Literacy in Action
A course in the use of drama as it relates to the development of literacy in classroom and community settings. (Prerequisite: 24-261.) (Restricted to Drama in Education and Community students only.)

24-378. Theatre for Social Action
A study of the theory, practice, and development of popular, community, and collective theatre. Students will examine various approaches to theatre for social action through a combination of academic study and practical exercises in specific popular theatre techniques, including Theatre of the Oppressed and Playback Theatre. (Open only to 3rd and 4th year Drama in Education and Community students or by consent of Instructor.) (May be repeated for credit twice if assignments or approaches are significantly different.)

24-384. Creative Movement and Voice II
Continuation of 24-284. The study and practice of movement and voice as they relate to the individual, theatre, and the classroom. Emphasis may be on one or both disciplines as necessary. (Prerequisite: 24-284 or consent of instructor.) (Laboratory hours by arrangement.)

24-400. Style in Theatre
An exploration of selected theatrical styles. Topics and materials may vary from year to year. (Students may use this course number to register for the Stratford Summer Campus. Contact Dramatic Art for further information.) (May be repeated for credit twice if assignments or approaches are significantly varied.)

24-420. Graduation Recital
The selection, preparation, and presentation of suitable audition material in a recital situation. An introduction to the business of being a professional actor will be addressed. (Prerequisite: All required first, second, and third year B.F.A. performance courses; restricted to fourth-year B.F.A. Acting students only.) (Laboratory hours by arrangement.)

24-421. Television Performance
Introduction to basic television performance techniques. Each student performs behind and in front of the camera although the emphasis is on performance. (Prerequisite: 24-225 or 24-235, or 24-323 and 24-324. or by consent of instructor. Restricted to third- and fourth-year Dramatic Art and Communication Studies students in the Combined Dramatic Arts and Communication Studies program, and third and four year Dramatic Art students.) (May be taken for credit twice.)

24-429. Character Study
Independent work in researching, developing, and presenting character projects based on life studies. (Restricted to Fourth year B.F.A. Acting students only.) (May be taken for credit twice with consent of instructor if assignments or their treatments are significantly varied.)

24-439. Directed Studies in History, Theory, or Theatre Administration
Designed for the advanced student who wishes to explore a special area of history, theory, or theatre administration with a faculty advisor. (Prerequisite: consent of a faculty advisor.) (May be taken for credit twice if assignments or their treatments are significantly varied.) (Hours by arrangement.)

24-449. Directed Studies in Direction
Designed for the advanced student who wishes to explore a special area of direction with a faculty advisor. (Prerequisite: consent of the faculty advisor.) (May be taken for credit twice.)

24-451. Performance Seminar
Study of professional practice and performance in theatre art in a work-in-progress situation. (Restricted to B.F.A. Acting students only.)

24-452. Directed Studies in Production
A series of theatrical play production situations in which the advanced student will research, develop, and execute a major technical/design assignment under the supervision of a faculty advisor. (May be repeated for credit if assignments or approaches are significantly varied.) (Prerequisite: consent of a faculty advisor.)

24-453 to 24-458. Directed Studies in Performance
The emphasis in these courses will be a series of plays selected and produced by Dramatic Art or by a theatre company outside of the University as approved by Dramatic Art. Students will research, develop, and execute a role in the performance situation under the supervision of a faculty advisor-director. (May be taken for credit twice.) (Restricted to students who have successfully completed the third year of the B.F.A. Acting Program.)

24-469. Directed Studies in Cross-Cultural Theatre
Designed for the advanced student who wishes to explore a special area of theatre of a unique culture with a faculty advisor. (Prerequisite: previous experience/courses in the subject area(s) explored and consent of a faculty advisor.) (Restricted to students in Semester 5 and above.) (May be taken for credit twice.)

24-470. Theatre for Young Audiences
Research and practical work in the history, principles, and techniques of theatrical performance by, with, and for young audiences. Students may explore international perspectives on topics such as: Theatre in Education, Children's Theatre, Theatre for Youth, Collective Creation, and Devised Theatre. (Prerequisites: 24-277, 24-284, 24-225.) (May be repeated for credit twice if assignments or approaches are significantly varied.)

24-471. Drama and Community: Applications
A project-based practical course in the principles and techniques of drama and theatre as they relate to community, educational, and healthcare settings. Students will develop and deliver projects based on topics such as: Drama/Theatre and Disabilities, Theatre in Education, Socio-political Theatre, Popular Theatre, and Theatre for Young Audiences. Projects will be driven by the current research interest and involvement of the instructor or the need and interests of community groups. (Open only to 3rd and 4th year Drama in Education and Community students or by consent of instructor.) (May be repeated for credit if assignments or approaches are significantly varied.)

24-479. Directed Studies in Drama in Education and Community
Independent, directed study in a special area of interest in drama in education under the supervision of a faculty advisor. (May be taken for credit twice.) (Prerequisite: 24-371 and 24-377 or consent of the faculty advisor.) (Placement hours by arrangement.)

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EARTH AND ENVIRONMENTAL SCIENCES: COURSES

ENVIRONMENTAL SCIENCE

66-100. Introduction to Geomorphology
The landscapes of the earth, with particular reference to the glaciers, coastlines, rivers, and northern permafrost regions of Canada. (3 lecture hours a week.)

66-102. Atmosphere and Climate
An introduction to the atmosphere and the basic principles of meteorology and climatology. Topics include weather systems, atmospheric pollution and inadvertent climate modification, climate change and relationships between climate and living organisms. (3 lecture hours a week.)

66-110. Natural Hazards and Disasters
The Earth's component systems and their interrelationships. Earth hazards and the Earth's interior processes: volcanism and earthquakes. Hazards and surface processes: landslides and floods. Atmospheric hazards: storms, hurricanes and tornadoes. (May be taken by Science students for credit, but does not count as a Science option towards the fulfillment of the specified requirements for a Science degree). (Antirequisite: 66 140) (2 lecture hours per week)

66 -111. Our Changing Earth
Origin of the universe and solar system; focus on the Earth and moon; earliest life forms. Measurement of geological time. Global climatic change in geological history; drifting continents; deserts, floods and ice sheets. Fossils and evolution; extinctions and probable causes. Human evolution and migrations; early technologies. (May be taken by Science students for credit, but does not count as a Science option towards the fulfillment of the specified requirements for a Science degree). (2 lecture hours a week)

66-112. Introduction to Planetary Science
An introduction to the origin of the Universe and Solar System. Topics include: the Big Bang theory; origin and organization of matter; and formation of galaxies, nebulae, stars, and planetary systems. The focus is on the geological features of planets, moons, asteroids, and comets. Coverage includes historical perspectives and current theory on astronomy, measurement of the ages of the Universe and Solar System, space exploration, Moon and Mars missions, analyses of NASA satellite images, the origin and evolution of life in the Solar System, and the search for possible extra-terrestrial life and intelligence in the Universe. (This course is designed for non-Science majors.) (3 lecture hours a week.)

66-140. Introduction to Earth Science
An introduction to Earth's physical character and the processes that shape our planet. The focus is on the geosphere: Earth materials, weathering, sedimentation, magmatism and volcanism, metamorphism, deformation, earthquakes, mountain building, and Earth's internal structure. These will be examined in the context of the origin of Earth, geologic time, and plate tectonics. The nature of mineral and energy resources will also be examined. This course is designed for Science majors. (2 lecture, 2.5 laboratory hours a week).

66-141. Introduction to Environmental Science
An introduction to the components of Earth's environment (geosphere, biosphere, atmosphere, and hydrosphere) and the principles and processes defining and influencing environmental systems (energy and matter cycles). Human interactions with, and influences on, the environment will be examined (resource and land use, waste and pollution, development, conservation and sustainability). This course is designed for Science majors. (3 lecture hours a week, optional field trips).

66-200. Principles of Resource Management
Systems analysis methodologies, scientific theories, ecological approaches, and sustainable resource management principles will be presented to examine the interrelationships governing the availability and cumulative impacts of utilizing both renewable and non-renewable resources. Resource management auditing methods and techniques will be applied for the assessment of several indicators,

including carrying capacity, ecological footprints, demographic transition, energy flows, agrosystems, land degradation, air and water quality, deforestation, biodiversity and successional changes. Discussions will also focus on integrative and adaptive resource management techniques and best management practices. (Antirequisite: 42-200.) (3 lecture hours a week.)

66-201. Science, Technology, and Society
This course is designed to explore the complex inter-relationships between science, technology, and society. The nature of science and scientific method and selected current issues in science and technology will be discussed. Topics may include chemicals in society, biotechnology and related issues, nuclear energy, and the impact of these technologies on society. Technology, as it relates to human values and public awareness, will also be considered. (Not open to Semester 1 and 2 students.) (May not be taken for credit towards a B.Sc. Degree in Environmental Science.) (Antirequisite: 03-200.) (3 lecture hours a week.)

66-202. Earth Materials
An introduction to the fundamental properties and characteristics of Earth materials. Topics include the nature of minerals (the principal components of sediments, soils and rocks), and the general chemical, mineralogical and physical characteristics of Earth materials. Coverage includes how geochemical and geophysical methods are used to determine the properties of Earth materials. (2 lecture and 3 laboratory hours/week.)(Prerequisites: 66-140 and 66-141 or consent of instructor.)

66-210. Introduction to Oceanography
Examination of the physical, chemical, geological and biological aspects of the oceans. Topics will include the interconnectedness of global climate, ocean currents, waves and tides, anthropogenic stressors, and their influence on marine biodiversity and ecosystems. (May be taken by B.Sc. students for credit as an option only. Does not count as a Geography course, or other major option towards the fulfillment of the requirements for the B.Sc. degree.) (3 lecture hours a week.)

66-213. Geology and the Environment
Effect of geological factors on the environment; pollution of groundwater, ground subsidence, nuclear waste disposal, subsurface disposal of liquid wastes, earthquake prediction and control. This course is designed specifically for the non-scientist. (May not be taken for credit towards a B.Sc. Degree in Environmental Science.) (2 lecture hours a week or equivalent.)

66-214. Geology and International Development
Aid, international development, and Earth processes; integration of water-resource management, soil conservation and agroforestry; geological hazards in a tropical setting; small-scale mining and conservation of mineral resources; engineering an improved quality of life in developing nations. (May not be taken for credit towards a B.Sc. Degree in in Environmental Science.) (2 lecture hours a week or equivalent.)

66-215. Introduction to Aerial Photography and Cartography
Basic concepts involved in cartographic theory and design, including map projections, longitude, latitude and UTM grid systems, and thematic and topographic maps, and the fundamentals of aerial photographs and other remotely sensed data (visible spectrum, infra-red and radar), satellite imagery, photogrammetry and photointerpretation. (2 lecture, 2 laboratory hours a week.)

66-216. Principles and Applications of Geographical Information Systems
This course emphasizes the principles, techniques, and applications of GIS. Lectures and laboratory exercises will focus on how to acquire, store, manipulate, and analyze spatial and non-spatial data. Data conversion, data reformatting, and data base development techniques will be explained. Students will create geographic coverages and learn techniques in the operation of a GIS by completing "hands-on" projects with modern GIS software. (It is recommended that students take 66-215 before taking this course.) (2 lecture, 3 laboratory hours a week.)

66-220. Climatology
A study of the major climatic elements, with special emphasis on the radiation budget, energy systems, and the hydrological cycle of Earth and the human environment. Climate classification, climatic change, climatological techniques, and aspects of applied climatology also will be examined. (Prerequisites: 66-102.) (2 lecture, 2 laboratory hours a week.)

66-221. Environmental Geomorphology

The study of landforms and Earth surface processes, and the impact of these processes on the environment. (2 lecture, 2 laboratory hours a week.)

66-224. Introduction to Geochemistry
An overview of the chemical composition of Earth and the factors governing the cycling of chemicals throughout Earth from the core through to surface environments. Principles of crystal chemistry, chemical reactions and equilibria, oxidation and reduction, adsorption and ion exchange and isotope chemistry and their relevance to Earth processes. (Prerequisites: 59-140, 59-141.) (3 lecture and/or tutorial hours per week.)

66-230. Hydrology
Fundamental processes in physical hydrology that control movement and storage of water within a watershed or catchment basin. Components of the water balance (precipitation, interception, infiltration, evapotranspiration, runoff, storage) and their variations in space and time. Theoretical and practical approaches to measurement and forecasting of components and their linkages. Special consideration of snowmelt, streamflow, wetlands, and human impacts. (Prerequisites: one of 66-100, 66-102 or 66-141; and one of 02-250, 65-205, or other University-level mathematics or statistics course; or consent of instructor.) (3 lecture, 2 laboratory hours a week.)

66-231. Introduction to Petrology
Petrography, textures, composition and classification of igneous and metamorphic rocks. Evolution of magmatic systems. Nature and causes of metamorphism. Relationship between global tectonics and magmatic and metamorphic processes. (Prerequisite: 66-202 or consent of instructor.) (2 lecture, 3 laboratory hours a week.)

66-232. Soils and Sediments
An introduction to the properties and characteristics of soils and sediments, the materials that cover much of Earth's surface and underlie surface water bodies. Topics include the formation and structure of soils and sediments, and how they are described, classified, and analyzed. Coverage includes the geographic distribution of soils and their importance as an environmental resource. (3 lecture and 2 laboratory hours per week.)(Prerequisites: 66-140 or 66-141, and 66-202 or consent of instructor.)

66-246. Environmental Decision Analysis
Earth systems, including climatic extremes, the industrialized ecosystem; decisions under uncertainty in mineral-resource exploration and development; rational approach to decision making, alternatives to decision analysis; environmental impact assessment and risk management, expert systems approach to environmental problem solving, applications in less developed countries. (3 lecture hours a week.)

66-247. Environmental Auditing in Mineral Resource Development
Cyclical flow of energy and matter in nature, human interaction with environmental processes, elements of policy analysis; environmental management systems and environmental impact assessment; environmental audit processes, steps in design and delivery; mineral resource development and the audit protocols; from audit to action plan, auditing the audit. (3 lecture hours a week.)

66-300. Scientific Writing and Data Management
Effective communication is fundamental to society and is particularly important in scientific endeavours. The ability to collect, process, analyze, and interpret data, and then communicate the significance of data to others, is fundamental to the scientific researcher and consultant. Students will develop skills in the written and oral communication of scientific thought through exercises in specific grammatical, writing, data processing, and management techniques. (2 lecture, 1 tutorial and 2 laboratory hours per week.) (Prerequisites: 66-141, 65-205 or consent of instructor.)

66-305. Environmental Sedimentology
Description and analysis of depositional and diagenetic processes, facies, environments and sequences. The impact of natural processes and anthropogenic activities on the nature, production, and accumulation of sediments. Effects of changes in hydrologic reservoirs and fluxes. (3 lecture hours per week, field trips). (Prerequisite: 66-232 or consent of the instructor.)

66-316. Environmental Modelling and Decision Analysis
An overview of different types of environmental models (e.g., conceptual, mathematical and statistical, process, and spatial) and how these models are used

within a decision analysis framework. Learned theory is applied to a variety of problem scenarios in a series of hands-on lab exercises. Emphasis is on spatial problems that use GIS and spreadsheets as the principle problem-solving tools. Scenarios demonstrate how environmental practitioners constrain problems, express important model parameters, transform data, and make informed decisions in the face of uncertainty. (3 lecture and 2 laboratory hours per week.) (Prerequisite: 66-216 or consent of instructor).(Credit may not be obtained for both 66-316 and 67-310).

66-320: Analysis of Environmental Materials
Students will develop a comprehensive understanding of the chemistry and crystallography of minerals and other natural materials. Topics will include techniques used to characterize natural materials (e.g., optical microscopy, scanning and transmission electron microscopy, spectroscopic techniques, elemental and isotopic microanalysis, and X-ray diffraction) and application of these methods to understanding environmental issues (2 lecture and 3 laboratory hours per week.)(Prerequisites: 66-140 and 66-202 or consent of instructor.)

66-327. Structural Geology
Rock deformation; primary and secondary structures; analysis and classification of folds and faults; interpretation of geologic maps; solution of structural problems. (Prerequisite: 66-231 or consent of instructor.) (3 lecture, 3 laboratory hours a week.)

66-328. Environmental Geochemistry
Processes such as water-rock interactions, element cycling, and contaminant mobility in near-surface geologic settings will be studied using the principles of geochemistry, thermodynamics and chemical kinetics. Topics covered in this course will include: the laws of thermodynamics, aqueous complexation, solutions and activities, redox reactions, solubility, phase equilibria and chemical kinetics in natural systems. (Prerequisite: 59-240 or 66-224 or consent of instructor.) (3 lecture and/or tutorial hours per week.)

66-330. Environmental Geophysics
An introduction to the use of seismic, electrical, electromagnetic and other geophysical methods used in near-surface environmental assessment studies. (Prerequisite: 66-202 or consent of instructor) (2 lecture, 3 laboratory hours a week.)

66-332. Issues in Resource and Environmental Systems
The complexities and nonlinear feedback mechanisms influencing the dynamic interactions between the allocation and utilization of biotic and abiotic resources in the spatial and temporal domains will be addressed within the conceptual framework of resource management paradigms, theories, and analytical methodologies. Contemporary problems and issues in resource and environmental systems will then be critically assessed, and best management practices will be appraised. (Prerequisites: 66-200 or consent of instructor.) (3 lecture and/or tutorial hours per week.)

66-334. Environmental Impact Assessment
This course provides an overview of the biogeophysical environment, and introduces peristametrics. The history, theories, and principles of Environmental Impact Assessment (EIA) will be examined and various methodologies for the preparation of an EIA report will be evaluated. Aspects of ethics, environmental laws, and administrative requirements for EIA studies in Canada are considered. EIA case studies are assessed and prepared. (Prerequisite: 66-332 or consent of instructor.) (3 lecture hours a week.)

66-370. Climate Change
A study of the causes of climate and climate change. Topics include the record of past climates, projection of future climate based on models incorporating anthropogenic factors, modification of local and regional climates, and the impact of these changes on the natural and human environment. (Prerequisite: 66-102 required, 66-220 recommended, or consent of instructor.) (3 lecture hours a week.)

66-380. Field Methods in Environmental Science
Field sampling and measurement techniques in the environmental sciences. Special consideration will be given to the measurement, evaluation and reporting of spatial and temporal data and to the collection and interpretation of geochemical data. Designed for Environmental Science students. (Prerequisites: 66-141, 66-202 and 66-224 or consent of instructor.) (1 week of fieldwork preceding Fall semester and 3 field or laboratory hours per week).

66-381. Field Measurement and Mapping Techniques
Introduction to sediment and water sampling, mapping methods, and field measurements. Interpretation of topographic maps, use of compasses and GPS units. Integration of field data into a GIS. Designed for Environmental Studies students. (Prerequisites: 66-100, 66-141 and 66-216 or consent of instructor.)(1 week of fieldwork preceding Fall semester and 3 field or laboratory hours per week).

66-402. Remote Sensing
An integrated course dealing with contemporary principles and applications of aerospace remote sensing. Emphasis will be placed on scanning systems; multispectral sensors; the identification and interpretation of spectral signatures; how the imagery obtained by sensors is analyzed optically or digitally to yield Earth resource information; and the manipulation and display of remotely-sensed data. (Prerequisite: 66-215 or consent of instructor.) (2 lecture, 1.5 laboratory hours a week.)

66-410. Environmental Assessment and Monitoring
An overview of the methods and procedures used for environmental site assessment (ESA) and monitoring as applied to unimpacted ('greenfield') and impacted ('brownfield') properties. Coverage includes the major elements of site characterization (e.g., Phase I & II ESA, BEA, RI-FS, RA and CAP), and applicable standards and guidelines (e.g., ASTM E1527 and E1903). Also included are an introduction to monitoring approaches and techniques for air, water, soil, sediment and waste, and an overview of the laws, rules and regulations governing ESA activities (3 lecture hours per week.) (Prerequisites: 66-224, 66-232 and 66-328 or consent of instructor.)

66-415. Ecosystem Health
The fundamental mechanisms and processes that structure ecosystems, anthropogenic activities that can alter them, and the policy and management used to protect them. Through class discussions and case studies, students develop a practical, problem-solving approach to issues associated with ecosystem health. Topics include food web and ecosystem ecology, ecosystem models, anthropogenic stressors, management methods and models, and national and international policies. (3 lecture hours per week.)(Prerequisites: 55-210 and 66-141 or consent of instructor.)

66-436. Hydrogeology
Fundamental physics and properties of groundwater flow in porous geologic material, develops an intuitive, problem-solving approach to hydrogeologic problems. Topics include: groundwater flow equations, flow nets, aquifer pumping, contaminant transport processes, two-phase flow, and dense non-aqueous phase liquids. Computer application will be emphasized. (Prerequisites: 66-141, 62-130 or equivalent, 66-230 recommended, or consent of instructor.) (3 lecture, 2 laboratory hours a week.)

66-437. Contaminant Hydrogeology
Application of elements of geology, geochemistry, physical chemistry, toxicology, biogeochemistry, and physical hydrogeology toward understanding and quantifying the movement, fate and toxicity of organic and inorganic substances (i.e., contaminants) in environmental systems. Selected topics include site characterization, physicochemical properties of contaminants, human and environmental toxicology, risk assessment, remediation technologies and feasibility, and contaminant transport and attenuation modeling. (2 lecture and 2.5 laboratory/tutorial hours per week.)(Prerequisites: 66-224, 66-328 and 66-436 or consent of instructor.)

66-440. Biogeochemistry
An investigation of global change focusing on the chemical, physical, geological, and biological processes that cycle elements through Earth's systems. Topics covered in this course will include: The origin of Life, global element cycles, mineral weathering and the global CO_2 budget, microbe-water-rock interactions (including: sorption, oxidation-reduction, and methylation of metals; biological degradation of organic molecules; application of molecular biology and stable isotope techniques to environmental problems). (Prerequisites: 66-224 or consent of instructor) (3 lecture and/or tutorial hours per week.)

66-441. Resource Development and Environmental Impact
Geochemical processes and environmental impact that may result from the development of natural resources (minerals, hydrocarbons), with special emphasis on the approaches used to extract and develop raw materials, and sustainable strategies to protect the environment. Topics include acid mine drainage, tailings

disposal, oil sands development, groundwater contamination, metal toxicity, and an integrative assessment of the role of metals and their influence on biota. (3 lecture hours per week.)(Prerequisites: 66-202, 66-224 and 66-328 or consent of instructor.)

66-470. Special Topics in Earth and Environmental Sciences
Selected topics of current interest. (Prerequisite: consent of instructor and a program advisor.) (3 lecture or project hours a week.) (May be repeated for credit if content changes.)

66-499. Thesis Research in Environmental Science
Each student will be required to carry out an original research project in Environmental Science and write a report under the supervision of one or more faculty members. The results of the research will also be presented in a public seminar. Students must consult with an Environmental Science counselor prior to enrolling in this course. (A 6.00 credit, two-semester course.) (Restricted to semester 7 and 8 students with a major G.P.A. of 8.0 or higher.)

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ECONOMICS: COURSES

All courses listed will not necessarily be offered each year. All courses are one-term courses and are offered three hours a week unless otherwise indicated.

41-110. Introduction to Economics I
An introduction to microeconomics intended to provide students with the tools necessary to begin to understand and evaluate how resources are allocated in a market economy. Specific topics include how markets function, theories of the business firm, of consumer behaviour and of income distribution. The economic roles of labour unions and government are also covered. The theories are applied to contemporary Canadian economic problems.

41-111. Introduction to Economics II
This course is an introduction to macroeconomics. The emphasis is upon measuring and explaining what determines economic aggregates such as the total national product (GDP) and the level of prices and employment. The role of money and financial institutions, the impact of international trade and the policy options available to governments for coping with inflation and unemployment are discussed in detail.

41-200. Life Choices and Economics
The course is designed for Arts and Social Sciences students. It will introduce them to key concepts and methods in Microeconomics. The application and understanding of economic analysis as applied to individual decision-making and public policy will be emphasized. The course provides a non-technical and intuitive way for students to master an understanding of real world problems. (May not be taken for credit in any program within the School of Business, or Faculty of Engineering. Science students may take the course only as a Social Sciences option.) (Antirequisite: 41-110.)

41-201. Life Choices and Economics II
The course is designed for Arts and Social Sciences students. It will introduce them to key concepts and methods in Macroeconomics. Key Macroeconomic concepts, such as unemployment, inflation, international trade, and investment will be examined. The course will be a non-technical look at the Canadian and world economies. (May not be taken for credit in any program within the School of Business, or Faculty of Engineering. Science students may take the course only as a Social Sciences option.) (Antirequisite: 41-111.)

41-210. Games and Behaviour
The course is designed for Arts, Social Science and Business students. It is intended to introduce them to key concepts and methods in game theory. The application and understanding of behavioral analysis as applied to individual decision making and public policy will be emphasized. The course provides a non-technical and intuitive way for students to master an understanding of real world problems and decision making. Students will learn about strategies for conflict resolutions, co-operation, social interaction, voting strategies, individual and business behaviour. (May not be taken for credit in Economics or joint programs with Economics, Science or the Faculty of Engineering.)

41-212. Intermediate Statistical Methods
An application of statistical methods to economic theory. (Prerequisite: one of 02-250, 65-250, 65-205, or 73-105.) (Credit will not be given for more than one of 41-212, 65-251, or any equivalent intermediate statistics course from another area.)

41-221. Intermediate Microeconomics I
The theory of markets, the theory of consumer behaviour and demand; the firm, production, cost, and supply. (Prerequisite: 41-110.)

41-222. Intermediate Microeconomics II
Extensions of the theory of consumer and firm behaviour; pricing under different market structures; distribution; general equilibrium and economic welfare. (Prerequisite: 41-221.)

41-231. Intermediate Macroeconomics I
A theoretical and policy oriented treatment of the determination of employment, output, interest rates, and the price level; stabilization policies and their effectiveness. (Prerequisites: 41-111.)

41-232. Intermediate Macroeconomics II
Effectiveness of stabilization policies in open economies; causes and cures of inflation; simple growth models. (Prerequisite: 41-231.)

41-266. Selected Issues in Economics
(Prerequisites: 41-110 and 41-111.)

41-290. Health Economics
This course will explore the unique economic features of health care with emphasis on international models of delivery, determinants of the demand and supply of health services, and public *versus* private health care systems. The Canadian experience will be considered with a focus on demographic patterns and legislation. (Pre-requisites: 41-110, 41-111; plus any university-level course in statistics.)

41-306. Mathematical Economics I
Economic applications of differential calculus and linear algebra, with an emphasis on problem solving and employing software used widely by economists. Topics include input-output analysis, optimization of linear microeconomic models, computer methods for comparative static exercises to analyze closed- and open-economy macroeconomic models, and unconstrained and constrained optimization of non-linear microeconomic models.(Prerequisites: 62-140 (or 62-139), 62-120 (or 62-125 or 62-126), 41-221,and 41-231.)

41-310. Environmental and Resource Economics
An examination of economic behaviour in renewable and non-renewable resource markets and an economic treatment of policy issues related to environmental quality and common property resources. (Prerequisite: 41-221, or the combination of 41-110 and one of 62-130, 62-139 or 62-140.)

41-313. Introduction to Econometric Methods I
Development of the classical regression model and problems associated with this model such as multicollinearity, heteroscedasticity, and autocorrelation. (Some familiarity with linear algebra and calculus will be beneficial.) (Prerequisites: (a) 41-212 or 65-251; (b) one of 62-130, 62-139 or 62-140; and, (c) one of 62-120, 62-125 or 62-126.)

41-331. The Economics of Legal Procedures, Crime, and Punishment
The application of microeconomic principles in the analysis of legal procedures, crime, and punishment. Economic models of filing suit, bargaining, and going to trial will be discussed. Traditional and economic models of criminal activity will be compared and contrasted, along with the economics of civil and criminal punishment. Additional topics from other areas of law may be included. (Prerequisite: 41-221.)

41-335. Money and Banking
The banking system and other financial institutions; money demand and money supply; money and the level of economic activity; money and inflation; issues in monetary policy. (Prerequisite: 41-231.)

41-341. Economic Growth and Development Theory
Modern theories of growth and development with emphasis upon less developed countries. (Prerequisites: 41-221 and 41-231, or consent of instructor.)

41-350. Labour Theory
Wage theories, wage structure, unemployment, labour supply and related topics. (Prerequisite: 41-221.)

41-353. Labour Institutions
Canadian and American labour movements, collective bargaining, union philosophy and labour legislation in Canada and the United States. (Prerequisite: 41-221 or consent of instructor.)

41-373. International Economics: Trade Theory and Policy
A survey of traditional and contemporary theories of international trade and trade policy. (Prerequisite: 41-221.)

41-374. International Economics: Exchange Rates and Balance of Payments
Theory of exchange rate determination and balance of payments adjustment; macroeconomic policy in an open economy; current problems of the international monetary system. (Prerequisite: 41-231.)

41-380. Game Theory

The study of strategic interactions among decision makers. Equilibrium concepts, such as Nash equilibrium, sub-game perfect equilibrium, etc, will be introduced and their applications to economic, political and biological decision making will be discussed. (Prerequisite: 41-221 or the combination of 41-110 and one of 62-139 or 62-140.)

41-385. Public Sector Economics: Expenditure
Theory of the role of government in the economy; public expenditure theories and practice; public choice and government decision-making; government grants. (Prerequisites: 41-221.)

41-406. Mathematical Economics II
Topics will include general equilibrium theory, dynamic analysis, oligopoly, behaviour under uncertainty, and growth theory. (Prerequisites: 41-222, 41-232, 41-306, and 62-141.)

41-407. Senior Research Workshop
This course is intended to develop independent research and presentation skills. Students will be assigned a topic (or topics). Students will be expected to conduct a literature survey, collect data, present data in a descriptive format, formulate and carry out formal econometric tests. Students will be assessed on the basis of classroom presentations classroom discussion and written assignments. (Prerequisites: 41-313, 41-423 and 41-433.) (This course is open to students who are enrolled in an Honours Economics program.)

41-414. Introduction to Econometric Methods II
A continuation of 41-313. (Prerequisite: 41-313.)

41-416: Urban and Regional Economics
Economics of cities and urban problems; effects on production and trade; urban problems such as poverty, congestion, pollution and crime.

41-420. Industrial Organization Theory
A theoretical analysis of firms' behaviour in many different markets. (Prerequisites: 41-222.)

41-423. Advanced Microeconomics I
The use of mathematical techniques and economic analysis with special emphasis on consumer theory, producer theory, and theory of markets. (Prerequisites: 41-221, 41-222, 41-306, or consent of instructor.) (Students may not obtain credit for both 41-323 and 41-423.)

41-424. Advanced Microeconomics II
Selected topics in microeconomic theory. (Prerequisite: 41-423.)

41-430. Economics Analysis of Law
The application of microeconomic principles to the study of property, contract, and tort law. The economic principles underlying property rights, torts, and contracts are surveyed. Selected problems in property, tort, and contract law are considered. Additional topics from other areas of law may be included. (Prerequisite: 41-221.)

41-433. Advanced Macroeconomics I
Modern interpretations of macroeconomics, including inflation, unemployment, and policy implications. (Prerequisites: 41-232 and 41-306)

41-434. Advanced Macroeconomics II
Selected topics in macroeconomic theory. (Prerequisite: 41-433.)

41-460. Cost-Benefit Analysis
The techniques and application of cost-benefit analysis to public sector policies and projects. Topics include the welfare foundations or cost-benefit analysis, investment decision rules, the choice of a social discount rate, risk and uncertainty, shadow pricing of inputs and outputs, public sector pricing and the assessment of the value of intangibles such as time, life and noise. (Prerequisite: 41-221, or the combination of 41-110 and one of 62-130 or 62-140.)

41-486. Public Sector Economics: Finance
Government taxation, user charges, borrowing, and the public debt in theory and practice; use of taxation as fiscal policy; and intergovernmental tax relations. (Prerequisites: 41-222.)

41-499. Selected Topics in Economics
(May be repeated for credit with consent of an advisor in Economics.)

Fall 2015 Undergraduate Calendar

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EDUCATION AND ACADEMIC DEVELOPMENT: PRE-SERVICE COURSES (up to Spring 2015)

Pre-Service courses may extend over one or two terms. All courses are offered over two semesters unless otherwise stated.

80-199. Teaching and Learning Part I
The course provides students with directed experience in a community service organization such as a service club, a youth club or group, a national park or conservation area, or a science museum. The Faculty of Education Field Experience Office will arrange the Community Service Field Placements, where applicable. Workshops and seminars will prepare students for the Community Service Field Placements and introduce students to the Professional Year Applicant Portfolio as a means of documenting and reflecting on professional learning and practice in the teaching profession. (Open only to second-year students in the French, Science and Mathematics Concurrent Education programs).

80-200. Religious Education in Roman Catholic Schools
This course is provided for those preparing themselves for the ministry of teaching in the Roman Catholic Schools of Ontario. This course is open to all Education students.This course offers prospective teachers the opportunity: 1) to reflect, in an adult context, upon the significance of their faith and faith growth for themselves and their students; 2) to gain a theological background for an introduction to Religious Education. (16 hour course.)

80-203. Psychology in Education
Psychology applied to teaching: child growth and development, the learning process, mental health, learning and adjustment problems in the environment.

80-204. Differentiated Instruction for Students with Special Needs
This course provides an introduction to the field of special education in the Canadian context, focusing on background knowledge needed by teachers to address diverse learning needs in inclusive classrooms. The course surveys the learning needs of children and adolescents with both high and low incidence exceptionalities, and highlights methods of differentiating classroom instruction to meet their individual needs, as well as approaches for remedial assistance for specific learning difficulties.

80-205. Educational Foundations, Law and Ethics
This course focuses on provincial legislation and policies and explores the significance of professional learning and ethical conduct that involves understanding a range of educational philosophies and pedagogical approaches.

80-207. Contemporary Topics in Education
A menu of enrichment courses taken in addition to the normal program requirements. The courses are for credit and engage teacher candidates in critical reflection of issues considered to be urgent priorities in education in a changing society. Topics include Aboriginal education, environmental education, English as an Additional Language, Language and cultural engagement, and working with marginalized students, schools and communities. The enrollment in these courses is small and teacher candidates typically sign on for one. (May be repeated for credit, if content changes.)

80-209. Contemporary Social Issues in Education
An introduction to critical reflection and analysis of educational issues. This course addresses the varieties of students who enter the classroom in terms of their diverse social origins, cultures, identities, and social status (lived and perceived). It engages participants in an examination of the purposes of education, education policy, and teachersâ responsibility to work productively with school colleagues and other adults to achieve equitable access, experiences, and outcomes for all students.

80-299. Community Service Education
This course provides students with directed field experiences in a grade 9 or 10 classroom (mathematics or science) during each of the Fall and Winter semesters. The Faculty of Education Field Experience Office will arrange the Field Placements. Workshops and seminars will provide an orientation to schools, with

a focus on school culture and school community, and assist students in developing their Professional Year Applicant Portfolio as a means of documenting and reflecting on professional learning and practice in the teaching profession. (Open only to third-year students in the French, Science and Mathematics Concurrent Education programs (Prerequisite: 80-199).

80-311. Visual Arts Methodology
An introduction to the growth, development, and learning of children from Junior Kindergarten to grade 6 with an emphasis on instructional practices and curriculum planning for teaching visual arts.

80-312. Learning with Technologies
This course explores a range of digital technologies in educational settings. Focusing on teaching, learning and inquiry, students will evaluate digital educational resources, critically discuss and assess uses of new media in school-based contexts, gain hands-on experiences with various digital tools, and develop various multimedia instructional tools with the aim of building an intelligent and thoughtful disposition towards the use of learning technologies within their own classroom and school contexts.

80-313. Health and Physical Education Methodology
An introduction to the growth, development, and learning of children from Junior Kindergarten to grade 6 with an emphasis on instructional practices and curriculum planning for teaching health and physical education.

80-314. Language Arts Methodology
An introduction to the growth, development, and learning of children from Junior Kindergarten to grade 6 with an emphasis on instructional practices and curriculum planning for teaching language arts.

80-315. Mathematics Methodology
An introduction to the growth, development, and learning of children from Junior Kindergarten to grade 6 with an emphasis on instructional practices and curriculum planning for teaching mathematics.

80-316. Music Methodology
An introduction to the growth, development, and learning of children from Junior Kindergarten to grade 6 with an emphasis on instructional practices and curriculum planning for teaching music.

80-317. Science Methodology
An introduction to the growth, development, and learning of children from Junior Kindergarten to grade 6 with an emphasis on instructional practices and curriculum planning for teaching science.

80-318. Social Studies Methodology
An introduction to the growth, development, and learning of children from Junior Kindergarten to grade 6 with an emphasis on instructional practices and curriculum planning for teaching social studies.

80-319. Issues in Education
An introduction to critical reflection and analysis of social, cultural and political issues in education.

80-321. Visual Arts Methodology
An introduction to the growth, development, and learning of children from grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching visual art.

80-322. Instructional Technology
An introduction to instructional technology and its integration into the elementary curriculum (grades 4 to 8), including detailed study and application of teaching practices and curriculum planning.

80-323. Health and Physical Education Methodology
An introduction to the growth, development, and learning of children from grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching health and physical education.

80-324. Language Arts Methodology
An introduction to the growth, development, and learning of children from grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching language arts.

80-325. Mathematics Methodology
An introduction to the growth, development, and learning of children from grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching mathematics.

80-326. Music Methodology
An introduction to the growth, development, and learning of children from grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching music.

80-327. Science Methodology
An introduction to the growth, development, and learning of children from grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching science.

80-328. Social Studies Methodology
An introduction to the growth, development, and learning of children from grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching social studies.

80-330. Topics in IS Methodology
An examination of curriculum planning and integration, lesson planning, assessment and evaluation, and active learning instructional practices appropriate to teaching grades 7 and 8.

80-331. Visual Arts Methodology
An introduction to the development and learning of students in grades 7 to 8 with an emphasis on instructional practices and curriculum planning for teaching visual art.

80-332. Instructional Technology
An introduction to instructional technology and its integration into the secondary curriculum, including detailed study and application of teaching practices and curriculum planning.

80-333. Health and Physical Education Methodology
An introduction to the development and learning of students in grades 7 to 8 with an emphasis on instructional practices and curriculum planning for teaching health and physical education.

80-334. Language Across the Curriculum
An introduction to the development and learning of students in grades 7 to 8 with an emphasis on instructional practices and curriculum planning for teaching language arts across the curriculum.

80-335. Mathematics Methodology
An introduction to the development and learning of students in grades 7 to 8 with an emphasis on instructional practices and curriculum planning for teaching mathematics.

80-336. Music Methodology
An introduction to the development and learning of students in grades 7 to 8 with an emphasis on instructional practices and curriculum planning for teaching music.

80-337. Science Methodology
An introduction to the development and learning of students in grades 7 to 8 with an emphasis on instructional practices and curriculum planning for teaching science.

80-338. Social Studies Methodology
An introduction to the development and learning of students in grades 7 to 8 with an emphasis on instructional practices and curriculum planning for teaching social studies.

80-339. Career and Guidance Education
An introduction to the development and learning of students in grades 7 to 8 with an emphasis on career and guidance education.

80-340. Integrated Theme Project
This course provides teacher candidates with experience collaborating on the development of a sequence of learning activities designed to meet Ministry expectations for grades 7 or 8 in at least three subject areas.

80-352 to 80-380. Junior - Intermediate, Intermediate - Senior Methods

These courses provide a more detailed study and application of the aims and teaching procedures of specific subjects in the Junior-Intermediate and Intermediate-Senior concentrations. Intermediate-Senior candidates must select two courses from the Table of Options. Junior-Intermediate candidates must select one.

80-386. Curriculum Development for Technological Studies Part I
An introduction to the theory and practice of curriculum development for Broad-Based Technology programs in secondary schools. The course uses a constructivist approach to promote integrated learning and broad-based technology approaches through activities that lead to the development of unit plans, a course of study, a project outline, a student learning module and a course portfolio. Thematic and project-based strategies are used to address the learning expectations outlined in curriculum guidelines and policy documents and provide a variety of student learning styles, teaching approaches, and assessment and evaluation strategies. Shop safety and workplace safety are themes infused throughout the course.

80-387. Curriculum Development for Technological Studies Part II
An introduction to the theory and practice of curriculum development for Broad-Based Technology programs in secondary schools. The course uses a constructivist approach to promote integrated learning and broad-based technology approaches through activities that lead to the development of unit plans, a course of study, a project outline, a student learning module and a course portfolio. Thematic and project-based strategies are used to address the learning expectations outlined in curriculum guidelines and policy documents and provide a variety of student learning styles, teaching approaches, and assessment and evaluation strategies. Shop safety and workplace safety are themes infused throughout the course. (Prerequisite: 80-386.)

80-388. Principles and Methods of Teaching Technological Studies Part I
This course is an introduction to the methodology and processes of facilitating learning in the Broad-Based Technological Education classroom. The course will provide opportunities to apply pre-instructional planning, instruction and classroom management skills, ongoing and post-instructional assessment and evaluation strategies. Emphasis is on course activities that will focus on teaching and learning theories, the dynamics of team and group learning, and the development of written and oral communication skills. Course activities include lesson planning, team practice teaching, report writing, seminar presentations, and the development of video and print student learning modules.

80-389. Principles and Methods of Teaching Technological Studies Part II
This course is an introduction to the methodology and processes of facilitating learning in the Broad-Based Technological Education classroom. The course will provide opportunities to apply pre-instructional planning, instruction and classroom management skills, ongoing and post-instructional assessment and evaluation strategies. Emphasis is on course activities that will focus on teaching and learning theories, the dynamics of team and group learning, and the development of written and oral communication skills. Course activities include lesson planning, team practice teaching, report writing, seminar presentations, and the development of video and print student learning modules. (Prerequisite: 80-388.)

80-399. Teaching and Learning Part II
This course provides students with directed field experiences in a grade 11 or 12 classroom (mathematics or science) during the Fall semester. The Faculty of Education Field Experience Office will arrange the Field Placements. Workshops and seminars will provide an orientation to the senior division, with a focus on school culture and school community, and assist students in completing their Professional Year Applicant Portfolio. (Open only to fourth-year students in the French, Science and Mathematics Concurrent Education programs.) (Pre-requisites: 80-199 and 80-299).

80-497. Internship
The Internship consists of 100 hours of skills upgrading along with a number of assignments related to the selected discipline. It allows candidates to deepen and broaden their skills and knowledge in their selected area of technological education. A technology skills profile will be used to track the range and level of skills of each candidate. The Program Coordinator for the Technological Education program will work with Board-based Technological Program Consultants across the province to select teacher advisors who will support teacher candidates during their Internship period. The Technological Program Consultants will be responsible for evaluating teacher candidates during their Internship.

80-498. Practicum
The practicum consists of two main components: orientation to schools, with a focus on school culture and school community; and classroom practice related to the candidate=s specific discipline. Teacher candidates are assigned, during Fall and Winter practicum sessions, to schools or other settings approved by the Ontario College of Teachers, for a minimum of sixty days of combined observation and practice related to these components. As well, candidates will do 100 hours of pedagogical workshops, courses or seminars, offered by the Board. The Technological Program Consultant will sign off on this training. Candidates would be required to visit schools that offer their discipline. The Technological Program Coordinator will set up the school visits and the Board will pay for teacher coverage during their absence from regular teaching.

80-491, 492, 493, 494 and 499. Practice Teaching
Directed observation and practice teaching is provided through a series of field experiences. Primary-Junior candidates will normally be placed in Grades K to Six inclusive; Junior-Intermediate candidates will normally be placed in Grades Four to Ten inclusive; Intermediate-Senior candidates will be placed in Grades Seven to Twelve inclusive.

EDUCATION AND ACADEMIC DEVELOPMENT: PRE-SERVICE COURSES (as of Fall 2015)

Pre-Service courses may extend over one, two or four terms.

80-199. Teaching and Learning Part I
The course provides students with directed experience in a community service organization such as a service club, a youth club or group, a national park or conservation area, or a science museum. The Faculty of Education Field Experience Office will arrange the Community Service Field Placements, where applicable. Workshops and seminars will prepare students for the Community Service Field Placements and introduce students to the Professional Year Applicant Portfolio as a means of documenting and reflecting on professional learning and practice in the teaching profession. (Open only to second-year students in the French, Science and Mathematics Concurrent Education programs).

80-200. Religious Education in Roman Catholic Schools
This course is provided for those preparing themselves for the ministry of teaching in the Roman Catholic Schools of Ontario. This course is open to all Education students. This course offers prospective teachers the opportunity: 1) to reflect, in an adult context, upon the significance of their faith and faith growth for themselves and their students; 2) to gain a theological background for an introduction to Religious Education. (1.5 Credit Weight).

80-201. Foundations of Practice (Part I): Philosophical Orientation to Education
Theories of learning and the nature of learning will be explored so that teacher candidates begin an inquiry process toward their teaching philosophy. (1.5 Credit Weight)

80-202. Foundations of Practice (Part II): Classroom Practice
Theories from Part 1 will be linked to instructional aspects of teaching, discovering strategies that are related to teacher candidates' perspective/philosophy of teaching. (1.5 Credit Weight)

80-203. Educational Psychology
Psychology applied to teaching: child growth and development, the learning process, mental health, learning and adjustment problems in the environment. (3.0 Credit Weight)

80-204. Differentiated Instruction for Students with Special Needs
This course provides an introduction to the field of special education in the Canadian context, focusing on background knowledge needed by teachers to address diverse learning needs in inclusive classrooms. This course provides an introduction to the field of special education in the Canadian context, focusing on background knowledge needed by teachers to address diverse learning needs in inclusive classrooms. It will examine the various methodologies used for differentiating instruction, accommodating and modifying instruction for IEP's, tiered instruction, and using technology to assist learning. (3.0 Credit Weight)

80-205. Educational Foundations, Law and Ethics

This course focuses on provincial legislation and policies and explores the significance of professional learning and ethical conduct that involves understanding a range of educational philosophies and pedagogical approaches. (Open only to Concurrent Education students.) (3.0 Credit Weight)

80-206. Aboriginal Ways of Knowing: Cultural, Political and Linguistic Contexts
Emphasis will be on critical thinking around the politics of education, explore resources so educators can better support Aboriginal learners and increase awareness about First Nations, Métis and Inuit culture as well as the multicultural and inclusive classrooms. (1.5 Credit Weight)

80-207. Service Learning Specialization
Students select one of the following options according to their division PJ/JI/IS (3.0 Credit Weight):

1. Leadership Experience for Academic Direction (LEAD) (JI/IS)
   In this course students will gain an understanding of youth in the 21st century who are identified as being in-risk. Social learning theories, theories of resilience and personal and social responsibility are integrated. Teacher candidates will be responsible for a minimum of a 20-hour experiential service-learning project within the school community.

2. Urban Education (PJ)
   In this course, teacher candidates will gain an understanding of expressions of power in society and SES factors that affect the teaching/learning process in our urban city schools in relation to issues of racism, ethnocentrism and poverty. Teacher candidates will be responsible for a minimum of a 20-hour experiential service-learning project within the school community or community at-large.
3. English Language Learners (PJ/JI/IS)
   An understanding of the English Language Learner and how to engage the learner in learning is critical in the success of the Ontario urban classroom. Teacher candidates will be responsible for a minimum of a 20-hour experiential service-learning project within the school community or community at-large.
4. Global Learning: Cultural Engagement (PJ/JI/IS)
   Global and Cultural Education International Experience allows for intercultural dialogue and engagement and provides a challenge to advocate for a global cross-cultural future in harmony and peace. Teacher candidates will be responsible for a minimum of a 20-hour experiential service-learning project within the global community.
5. Beginning Time Aboriginal Teaching (PJ/JI)
   In this course, teacher candidates participate in a series of learning experiences that will allow them to think through and learn from traditional teachings and learning modalities. Teacher candidates will be responsible for a minimum of a 20-hour experiential service-learning project within the aboriginal community.
6. Early Childhood Education (PJ)
   An introduction to Early Childhood Education provides the candidate with the opportunity for discovery of the nature of child development and learning through a specific early childhood education program preparing the candidate for full day kindergarten. Teacher candidates will be responsible for a minimum of a 20-hour experiential service-learning project within the Early Childhood Education community within schools or Early Childcare Centres.

7. Ecology and Wellness (PJ/JI/IS)
   A course designed to study environment issues, concepts and pedagogy to advocate for sustainability, environmental justice and stewardship as well as becoming environmentally literate. Teacher candidates will be responsible for a minimum of a 20-hour experiential service-learning project within school communities.
8. 'Going the Extra Mile' (MILE) Project (PJ)
   Teacher candidates will go the extra "MILE" to combine academic study with service learning. In this course teacher candidates service students and communities in low SES neighbourhoods in the area. In addition to the benefits of engagement and service for both teacher candidates and the local community that they serve, teacher candidates gain valuable skills and experiences while establishing rapport, gaining insights to understand the lived reality of children beyond the classroom, and to make connections between inquiry

and practice. Teacher candidates will be responsible for a minimum of a 20-hour experiential service-learning project within the school community or the low SES community at-large.

80-208. Assessment and Evaluation
This course will examine ways to incorporate “assessment as”, “assessment for” and “assessment of” learning in all classes. Emphasis will be placed on incorporating frequent, continuous assessment techniques to foster an environment of intrinsic motivation for success. Strategies for tying feedback directly to curriculum expectations will also be explored. (1.5 Credit Weight)

80-209. Critical Analysis of Social, Global & Cultural Issues in Education
An introduction to critical reflection and analysis of educational issues. This course addresses the varieties of students who enter the classroom in terms of their diverse social origins, cultures, identities, and social status (lived and perceived). It engages participants in an examination of the purposes of education, education policy, and teachers’ responsibility to work productively with school colleagues and other adults to achieve equitable access, experiences, and outcomes for all students. (1.5 Credit Weight)

80-210. Foundations of Practice (III) Law and Ethics – School Governance
This course focuses on provincial legislation and policies and explores the significance of professional learning and ethical conduct that involves understanding a range of educational philosophies and pedagogical approaches. (Open only to Consecutive Education students.) (1.5 Credit Weight)

80-211. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (P/J)
This course situates the arts in Junior Kindergarten to Grade 6 classes and communities and examines how they contribute to the growth of knowledge, creativity, and critical thinking in our students and in society. This will include strategies to encourage best practices in teaching and supporting learning and attainment of skills and knowledge in aesthetic and artistic practices.The course emphasises differentiated instructional practices, diversity, curriculum planning and assessment. (The course will be presented in both Lecture and Lab format.) (12.0 Credit Weight)

80-215. Mathematics Foundations (P/J)
This course is intended to give prospective teachers an in-depth preparation in the content, concepts, and principles of elementary mathematics education for students in Junior Kindergarten - Grade 6. Real-life problem solving approaches, usefulness, and power of mathematics in everyday life will be emphasized in the course. The use of manipulatives, investigations, discussions, and the application of modern technological tools in appropriate situations. (3.0 Credit Weight)

80-221. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (J/I)
This course situates the arts in Grades 4 to 8 classes and communities and examines how they contribute to the growth of knowledge, creativity, and critical thinking in our students and in society. This will include strategies to encourage best practices in teaching and supporting learning and attainment of skills and knowledge in aesthetic and artistic practices.The course emphasises differentiated instructional practices, diversity, curriculum planning and assessment. (The course will be presented in both Lecture and Lab format.) (12.0 Credit Weight)

80-225. Mathematics Foundations (J/I)
An introduction to the growth, development, and learning of children from Grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching mathematics. (1.5 Credit Weight)

80-231. Pedagogy of the Arts: Music, Visual Art, Dance/Drama (I/S)
This course situates the arts in Grades 7 to 8 classes and communities and examines how they contribute to the growth of knowledge, creativity, and critical thinking in our students and in society. This will include strategies to encourage best practices in teaching and supporting learning and attainment of skills and knowledge in aesthetic and artistic practices. The course emphasises differentiated instructional practices, diversity, curriculum planning and assessment. (The course will be presented in both Lecture and Lab format.) (4.5 Credit Weight)

80-299. Community Service Education
This course provides students with directed field experiences in a grade 9 or 10 classroom (mathematics or science) during each of the Fall and Winter semesters. The Faculty of Education Field Experience Office will arrange the Field Placements. Workshops and seminars will provide an orientation to schools, with

a focus on school culture and school community, and assist students in developing their Professional Year Applicant Portfolio as a means of documenting and reflecting on professional learning and practice in the teaching profession. (Open only to third-year students in the French, Science and Mathematics Concurrent Education programs (Prerequisite: 80-199).

80-311. Visual Arts Methodology
An introduction to the growth, development, and learning of children from Junior Kindergarten to grade 6 with an emphasis on instructional practices and curriculum planning for teaching visual arts.

80-312. Digital Technology and Social Media Applications (P/J)
This course explores a range of digital technologies in educational settings. Focusing on teaching, learning and inquiry, students will evaluate digital educational resources, critically discuss and assess uses of new media in school-based contexts, gain hands-on experiences with various digital tools, and develop various multimedia instructional tools with the aim of building an intelligent and thoughtful disposition towards the use of learning technologies within their own classroom and school contexts. (3.0 Credit Weight)

80-313. Health and Physical Education (P/J)
This course explores a constructivist approach to teaching health and physical education to children from Junior Kindergarten to Grade 6 with an emphasis on differentiated instructional practices, diversity, curriculum planning and assessment. (3.0 Credit Weight)

80-314. Language Arts (P/J)
An introduction to the theories of learning and linguistics of children from Junior Kindergarten to grade 6 with an emphasis on curriculum content, expectations, ways of learning and implications of EQAO standardized testing. (3.0 Credit Weight)

80-315. Mathematics Methodology (P/J)
This course is designed to introduce methods for teaching mathematics to elementary students from Junior Kindergarten - Grade 6. This course focuses on children's thinking in mathematics and classroom practices that support and develop children's thinking. Teacher candidates will develop frameworks for assessing children's strategies for solving problems. They will explore the connection between arithmetical and algebraic thinking in the elementary grades. (3.0 Credit Weight)

80-316. Music Methodology
An introduction to the growth, development, and learning of children from Junior Kindergarten to grade 6 with an emphasis on instructional practices and curriculum planning for teaching music.

80-317. Science (P/J)
This course explores an inquiry-based approach to teaching science to children from Junior Kindergarten to Grade 6 with an emphasis on differentiated instructional practices, diversity, curriculum planning and assessment. (3.0 Credit Weight)

80-318. Social Studies (P/J)
This course explores a constructivist approach to teaching social studies to children from Junior Kindergarten to Grade 6 with an emphasis on differentiated instructional practices, diversity, curriculum planning and assessment. (3.0 Credit Weight)

80-319. Issues in Education
An introduction to critical reflection and analysis of social, cultural and political issues in education.

80-321. Visual Arts Methodology
An introduction to the growth, development, and learning of children from grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching visual art.

80-322. Digital Technology and Social Media Applications (J/I)
This course explores a range of digital technologies in educational settings. Focusing on teaching, learning and inquiry, students will evaluate digital educational resources, critically discuss and assess uses of new media in school-based contexts, gain hands-on experiences with various digital tools, and develop various multimedia instructional tools with the aim of building an intelligent and

thoughtful disposition towards the use of learning technologies within their own classroom and school contexts. (3.0 Credit Weight)

80-323. Health and Physical Education (J/I)
This course explores a constructivist approach to teaching health and physical education to children from Grades 4 to 8 with an emphasis on differentiated instructional practices, diversity, curriculum planning and assessment. (3.0 Credit Weight)

80-324. Language Arts (J/I)
An introduction to the growth, development, and learning of children from grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching language arts. (3.0 Credit Weight)

80-325. Mathematics Methodology (J/I)
An introduction to the growth, development, and learning of children from Grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching mathematics. (3.0 Credit Weight)

80-326. Music Methodology
An introduction to the growth, development, and learning of children from grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching music.

80-327. Science (J/I)
This course explores an inquiry-based approach to teaching science to children from Grades 4 to 8 with an emphasis on differentiated instructional practices, diversity, curriculum planning and assessment. (3.0 Credit Weight)

80-328. Social Studies (J/I)
This course explores a constructivist approach to teaching social studies to children from Grades 4 to 8 with an emphasis on differentiated instructional practices, diversity, curriculum planning and assessment. (3.0 Credit Weight)

80-330. Topics in IS Methodology
An examination of curriculum planning and integration, lesson planning, assessment and evaluation, and active learning instructional practices appropriate to teaching grades 7 and 8.

80-331. Visual Arts Methodology
An introduction to the development and learning of students in grades 7 to 8 with an emphasis on instructional practices and curriculum planning for teaching visual art.

80-332. Digital Technology and Social Media Applications (I/S)
This course explores a range of digital technologies in educational settings. Focusing on teaching, learning and inquiry, students will evaluate digital educational resources, critically discuss and assess uses of new media in school-based contexts, gain hands-on experiences with various digital tools, and develop various multimedia instructional tools with the aim of building an intelligent and thoughtful disposition towards the use of learning technologies within their own classroom and school contexts. (3.0 Credit Weight)

80-333. Health and Physical Education (I/S)
This course explores a constructivist approach to teaching health and physical education to children Grades 7 to 8 with an emphasis on differentiated instructional practices, diversity, curriculum planning and assessment. (1.5 Credit Weight)

80-334. Language Across the Curriculum (I/S)
An exploration of the development and learning of students in Grades 7 to 8 with an emphasis on instructional practices and curriculum planning for teaching language arts across the curriculum. (1.5 Credit Weight)

80-335. Mathematics (I/S)
An introduction to the growth, development, and learning of children Grades 7 to 8, with an emphasis on instructional practices and curriculum planning for teaching mathematics. (1.5 Credit Weight)

80-336. Music Methodology
An introduction to the development and learning of students in grades 7 to 8 with an emphasis on instructional practices and curriculum planning for teaching music.

80-337. Science (I/S)

This course explores an inquiry-based approach to teaching science to children Grades 7 to 8 with an emphasis on differentiated instructional practices, diversity, curriculum planning and assessment. (1.5 Credit Weight)

80-338. Social Science (I/S)
This course explores a constructivist approach to teaching social studies to children Grades 7 to 8 with an emphasis on differentiated instructional practices, diversity, curriculum planning and assessment. (1.5 Credit Weight)

80-339. Career and Guidance Education (I/S)
An exploration of the development and learning of students in grades 7 to 8 with an emphasis on career and guidance education. (3.0 Credit Weight)

80-340. Integrated Theme Project
This course provides teacher candidates with experience collaborating on the development of a sequence of learning activities designed to meet Ministry expectations for grades 7 or 8 in at least three subject areas.

80-352 to 80-380. Junior - Intermediate, Intermediate - Senior Methods
These courses provide a more detailed study and application of the aims and teaching procedures of specific subjects in the Junior-Intermediate and Intermediate-Senior concentrations. Intermediate-Senior candidates must select two courses from the Table of Options. Junior-Intermediate candidates must select one.

80-386. Curriculum Development for Technological Studies Part I
An introduction to the theory and practice of curriculum development for Broad-Based Technology programs in secondary schools. The course uses a constructivist approach to promote integrated learning and broad-based technology approaches through activities that lead to the development of unit plans, a course of study, a project outline, a student learning module and a course portfolio. Thematic and project-based strategies are used to address the learning expectations outlined in curriculum guidelines and policy documents and provide a variety of student learning styles, teaching approaches, and assessment and evaluation strategies. Shop safety and workplace safety are themes infused throughout the course.

80-387. Curriculum Development for Technological Studies Part II
An introduction to the theory and practice of curriculum development for Broad-Based Technology programs in secondary schools. The course uses a constructivist approach to promote integrated learning and broad-based technology approaches through activities that lead to the development of unit plans, a course of study, a project outline, a student learning module and a course portfolio. Thematic and project-based strategies are used to address the learning expectations outlined in curriculum guidelines and policy documents and provide a variety of student learning styles, teaching approaches, and assessment and evaluation strategies. Shop safety and workplace safety are themes infused throughout the course. (Prerequisite: 80-386.)

80-388. Principles and Methods of Teaching Technological Studies Part I
This course is an introduction to the methodology and processes of facilitating learning in the Broad-Based Technological Education classroom. The course will provide opportunities to apply pre-instructional planning, instruction and classroom management skills, ongoing and post-instructional assessment and evaluation strategies. Emphasis is on course activities that will focus on teaching and learning theories, the dynamics of team and group learning, and the development of written and oral communication skills. Course activities include lesson planning, team practice teaching, report writing, seminar presentations, and the development of video and print student learning modules.

80-389. Principles and Methods of Teaching Technological Studies Part II
This course is an introduction to the methodology and processes of facilitating learning in the Broad-Based Technological Education classroom. The course will provide opportunities to apply pre-instructional planning, instruction and classroom management skills, ongoing and post-instructional assessment and evaluation strategies. Emphasis is on course activities that will focus on teaching and learning theories, the dynamics of team and group learning, and the development of written and oral communication skills. Course activities include lesson planning, team practice teaching, report writing, seminar presentations, and the development of video and print student learning modules. (Prerequisite: 80-388.)

80-399. Teaching and Learning Part II
This course provides students with directed field experiences in a grade 11 or 12

classroom (mathematics or science) during the Fall semester. The Faculty of Education Field Experience Office will arrange the Field Placements. Workshops and seminars will provide an orientation to the senior division, with a focus on school culture and school community, and assist students in completing their Professional Year Applicant Portfolio. (Open only to fourth-year students in the French, Science and Mathematics Concurrent Education programs.) (Pre-requisites: 80-199 and 80-299).

80-414. Language and Media Literacy (P/J)
Emphasis will be placed on instructional practices and curriculum planning for teaching language arts through differentiated and tiered instruction. The use of media in language arts will be explored through a critical lens. (3.0 Credit Weight)

80-424. Language and Media Literacy (J/I)
An introduction to the growth, development, and learning of children from Grades 4 to 8, with an emphasis on instructional practices and curriculum planning for teaching language arts. (1.5 Credit Weight)

80-491, 492, 493, and 494. Practice Teaching
Directed observation and practice teaching is provided through a series of field experiences. Primary-Junior candidates will normally be placed in Grades K to Six inclusive; Junior-Intermediate candidates will normally be placed in Grades Four to Ten inclusive; Intermediate-Senior candidates will be placed in Grades Seven to Twelve inclusive.

80-497. Internship
The Internship consists of 100 hours of skills upgrading along with a number of assignments related to the selected discipline. It allows candidates to deepen and broaden their skills and knowledge in their selected area of technological education. A technology skills profile will be used to track the range and level of skills of each candidate. The Program Coordinator for the Technological Education program will work with Board-based Technological Program Consultants across the province to select teacher advisors who will support teacher candidates during their Internship period. The Technological Program Consultants will be responsible for evaluating teacher candidates during their Internship.

80-498. Practicum
The practicum consists of two main components: orientation to schools, with a focus on school culture and school community; and classroom practice related to the candidate's specific discipline. Teacher candidates are assigned, during Fall and Winter practicum sessions, to schools or other settings approved by the Ontario College of Teachers, for a minimum of sixty days of combined observation and practice related to these components. As well, candidates will do 100 hours of pedagogical workshops, courses or seminars, offered by the Board. The Technological Program Consultant will sign off on this training. Candidates would be required to visit schools that offer their discipline. The Technological Program Coordinator will set up the school visits and the Board will pay for teacher coverage during their absence from regular teaching. (Open only to student in the BEd/Diploma in Technological Education program.)

80-499. Practicum
The practicum consists of two main components: orientation to schools, with a focus on school culture and school community; and classroom practice related to the candidates' specific discipline. Teacher candidates are assigned, during Fall and Winter practicum sessions, to schools or other settings approved by the Ontario College of Teachers, for a minimum of 80 days of combined observation and practice related to these components. (16 Credit Weight)

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EDUCATION AND ACADEMIC DEVELOPMENT: IN-SERVICE COURSES

In-Service Courses
Additional Basic Qualification Courses
Additional Qualification Courses
Honours Specialist Qualification Courses
Principal's Qualification Course

For a complete description of all In-Service courses and registration procedures, please visit the Faculty of Education website at www.uwindsor.ca/edfac.

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FACULTY OF ENGINEERING: GENERAL COURSES

GENERAL ENGINEERING

85-111. Engineering Mechanics I
Statics of particles and rigid bodies; trusses, frames, machines; centroids and centres of gravity; friction. (3 lecture, 2 tutorial hours a week.) Credit Weight 4.0

85-118. Engineering and the Profession
The Engineering and the Profession course is an introductory professional course for all Engineering students. The students will be introduced to and learn about various professional and academic topics, and may include but are not limited to: differences and similarities between the various engineering disciplines; academic performance, expectations, and procedures; strategies for academic success; extracurricular student opportunities; important career development issues; academic integrity and ethical considerations; sustainability considerations; and public health and safety responsibilities; and how engineering is broadly related to our society. The fundamentals of technical communications will be introduced, focusing on common technical writing needs, such as grammar, formatting, and style, as well as basic writing forms, such as memos and short documents. Additional topics may include the basics of common engineering measurements, technical principles and approaches, business and legal practices. (3 lectures hours a week.) Credit Weight 3.0.

85-119. Technical Communications
The Technical Communications course focuses on teaching Engineering students effective oral and written communication techniques and approaches to improve their clarity and comprehensiveness when communicating to a variety of audiences. The topics covered may include but are not limited to: graphical communications, informative presentations; persuasive presentations; the use of visual aids for conveying technical/engineering information when speaking; resumes and job search communications; technical writing styles and formatting; information gathering and analysis; literature research techniques; topic development; summaries and abstracts; the use of visual tools such as graphs, figures, and tables; research documentation and referencing; developing and documenting instructions and procedures; proposals and technical reports. Ethical and legal issues in communications, such as plagiarism, will also be covered. Topics for discussion, assignments, and skills development activities may include issues and aspects taught in 85-118 or other relevant subjects. In addition, students will continue to receive periodic communications relevant to their academic and professional development. Credit Weight 3.0.

85-120. Engineering Thermofluids
Introductory thermodynamics, fluid mechanics, and heat transfer. Terminology and units; sources of and types of energy and their interchange; types of fluid flow and heat transfer; physical and thermal properties of fluids. Solution of basic problems using laws of thermofluids; exploration of common thermofluid systems. Includes demonstrations and laboratory-based experiments. (Prior knowledge from 85-111 or 64-140 is recommended.) (3 lecture, 2 tutorial/laboratory hours per week) Credit Weight 4.0

85-133. Engineering and Design
Introductory engineering design course. Visualization techniques, graphical communication using sketching, isometric drawings, orthographic projection, section views, auxiliary views and descriptive geometry. Drafting portfolio. Design portfolio consisting of open-ended problems: problem identification and formulation; analysis of the problem; problem solving techniques; graphical communication of the solution. Includes group work to develop personal, teamwork, leadership, and task completion skills. (3 lecture, 3 laboratory hours a week.) Credit Weight 4.5

85-198. Work Term
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of

a minimum of 420 hours. Students who do not pass the course may not be allowed to remain in the co-op program.)

85-212. Thermodynamics
An introductory thermodynamics course in which fundamental principles are developed. Included are ideal gas relations, properties of pure substances, First Law for closed and steady flow systems, the Second Law with entropy relations, and an introduction to cycles. (3 lecture, 1.5 tutorial hours a week.) (Prerequisite: 85-120) Credit Weight 3.75

85-218. Mechanics of Deformable Bodies
Introduction to stress, strain, stress-strain relations, and mechanical. A study of simple structures subjected to either axial load, flexure, and torsion, including flexure of beams, eccentric loads, shear and bending moment diagrams, shearing streses in beams. Additional topics may include statically indeterminate problems. (Prerequisites: 85-111 and 62-140.) (3 lecture, 3 laboratory/tutorial hours per week.) Credit Weight 4.5

85-219. Engineering Materials Fundamentals
This course explains how the properties of solid materials are derived and are related to their basic crystallographic and electronic structures: Metals, ceramics, polymers, and electronic materials are covered. (3 lecture, 2 laboratory or tutorial hours a week.) Credit Weight 4.0

85-220. Numerical Analysis for Engineering
Application of numerical methods to real-world engineering problems. Development of mathematical background for numerical techniques. Root finding; numerical linear algebra; curve fitting; numerical quadrature; numerical solution to ordinary differential equations. (Prerequisite: 85-232.) (3 lecture, 2 laboratory or tutorial hours a week.)

85-222. Engineering Treatment of Experimental Data
Treatment of engineering data using the concepts of frequency distribution; measures of central tendency and dispersion. Probability; random variables; discrete and continuous distributions. Tests of hypotheses; estimation; goodness-of-fit test; linear regression and correlation. Applications using computers in engineering design problems, quality control, and manufacturing processes. (Prerequisite: 62-140.) (3 lecture hours, 1 tutorial hour a week.) Credit Weight 3.5

85-230. Advanced Engineering and Design
Computer aided design applications for engineering graphic communication. Solid modeling; orthographic projection and isometric drawing; sections and conventions; dimensioning and tolerancing. Design portfolio and project. (Prerequisite: 85-133) (4 lecture/laboratory hours a week.) (Credit cannot be obtained for both 85-130 and 85-230.) Credit Weight 3.5.

85-232 Engineering Software Fundamentals
Fundamental engineering problems and the application of digital computers to analyze these problems. Introduction to additional programming languages and computing concepts, and emphasizing the use of MATLAB in engineering computations-(2 lecture, 2 tutorial hours a week.) (Credit cannot be obtained for both 85-232 and 85-132.) Credit Weight 3.0

85-233. Fluid Mechanics I
Fluid properties and basic concepts, fluid statics, equations of motion, one dimensional flows, flows in pipes in series, parallel and networks, dimensional analysis and similitude. (3 lecture hours, 1 tutorial hour a week.) (Prerequisite: 85-120) Credit Weight 3.5

85-234 Electrical and Computing Fundamentals
Electric charge, electric fields and potentials; conduction, resistivity, circuit variables, ideal sources and components; diodes; simple resistive circuits; techniques of circuit analysis, mesh and node analysis; network theorems, Thevenin and Norton theorems; source transformations; operational amplifiers, circuits, analysis and applications; inductance, capacitance; computer-oriented solution methods using SPICE and MATLAB. This course is for non-electrical engineering students. (3 lecture, 2.0 laboratory/tutorial hours or equivalent a week.) (Credit cannot be obtained for both 85-234 and 88-124 or 85-234 and 85-124.) Credit Weight 4.0.*[Note as of Winter 2012: Credit cannot be obtained for both 85-234 and 85/88-124 or 85-234 and 85/88-214]*

85-250. Engineering and the Environment
Introduction to: pollutants, natural cycles, natural energy use, human population

and consumption, common environmental problems, effects on human health. Dimensions of environmental contamination and flow. Pollution Prevention: waste audits, mass balances (open and closed systems, with and without chemical change), waste reduction, industrial ecology, and design for the environment. Conversion of energy and efficiency. Energy: world consumption, sources and their potential, environmental effects. Occupational health and safety. Environmental legislation. Sustainability. (Prerequisite: 59-110.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.0

85-298. Work Term I
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course may not be allowed to remain in the co-op program.)

85-313. Engineering Economics
Cost estimation, cost accounting, and cost control. Comparison of engineering alternatives by annual cost, present worth, and rate of return methods. Depreciation and taxes. Equipment replacement. (3 lecture, 1.5 tutorial hours a week.) Credit Weight 3.75

85-398. Work Term II
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course may not be allowed to remain in the co-op program.)

85-421. Engineering and Society
The technology-society relationship in a historical context; the nature of technological change and its consequences; the engineer's role in the control of technology and sustainable development; the responsibility of engineers for health and safety in the workplace, including OHSA, WHMIS. The development of the engineering profession; professional registration and the code of ethics; the duties and responsibilities of engineers; the engineer and the law. (Restricted to fourth-year students.) (3 lecture hours a week.) Credit Weight 3.0

85-498. Work Term III
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course may not be allowed to remain in the co-op program.)

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CIVIL AND ENVIRONMENTAL ENGINEERING: COURSES

CIVIL ENGINEERING

Students must have completed at least eight (8) of their 1st year courses before being allowed to register into the 2nd year courses.
Students must have completed all the 1st year courses and at least nine (9) of their 2nd year courses before being allowed to register into the 3rd year courses.
Students cannot register into any of the 4th year courses until they have completed nine (9) 3rd year Civil Engineering courses and all courses from 1st and 2nd year.

87-219. Materials in Civil and Environmental Engineering
Fundamental materials in civil and environmental engineering. Concrete: Portland cement, hydration, mixture design, admixtures, mixing, placing and curing. Masonry: masonry units, mortar, grout, and plaster, types of bond and joints. Timber: Structure and types of wood. Iron and steel: cast iron, wrought iron, steel products, structural steel, reinforcing steel, welded wire fabrics. Wastewater and biosolids, Coagulant and adsorbents. Particulate air pollutants. Solid waste and hazardous waste. Credit Weight 4.0

87-220. Civil Engineering Information Systems
A course in information systems in civil engineering including Surveying, GPS, GIS and Graphic communication. Surveying: Distance measurements; Leveling theory of differential leveling, curvature and refraction, types of surveying levels, leveling rods, benchmark leveling, profile and cross-section leveling; Angles and Theodolites: reference directions for vertical angles, meridians, horizontal angles, Total Station: reference directions for vertical angles, meridians, horizontal angles; Transverses Survey and Computations: balancing field angles, meridians, bearings, azimuths, latitude departures; Curves: circular curves, vertical curves, spiral curves. Introduction to GPS and GIS; applications of GIS and GPS in surveying. Graphic communication using AutoCAD. Required field trip*. (one week; immediately following the final examination period.) (Credit may not be obtained for both 87-220 and 87-210.) Credit Weight 4.0. **Note: There will be no additional fees for the field camp course.*

87-351. Fluid Mechanics
Continuity, energy, momentum concepts. Boundary layers. Pipe flow including network installations. Rotodynamic pumps, system curves. Irrotational flow, flownets. Introduction to open channel flow: specific energy, flow regimes; uniform, (Prerequisite: 85-120 and 62-216 (3 lecture, 2 laboratory hours a week.) (Credit cannot be obtained for both 87-313 and 87-351)

87-352. Stress Analysis
Distribution of internal loading in structural members; Deflection of beams; Moment areas theorems; Virtual work; Castigliano's theorems; Maxwell-Betti reciprocal theorem; Buckling of columns; and Application of Energy methods in simple determinate structures. (Prerequisite: 85-218) (3 lecture and 2 laboratory/tutorial hours a week.)

87-353. Structural Analysis
Stability and determinacy of trusses and frames; analysis of statistically determinate trusses and frames;Influence lines and moving loads. Statically indeterminate structures; force method; displacement method. (Prerequisite: 85-218.) (3 lecture, 2 laboratory hours a week.) (Credit cannot be obtained for both 87-310 and 87-353).

87-354. Concrete Design
Mechanics and behaviour of reinforced concrete components. Analysis and ultimate strength design of reinforced concrete beams and one-way slabs. Design for serviceability. Design for columns. Laboratory work includes design and testing of a concrete beam. (Prerequisite: 85-218) (3 lecture, 2 laboratory hours a week.) Credit Weight 4.0 (Credit cannot be obtained for both 87-311 and 87-354)

87-355. Geotechnical Engineering I
Index properties of soils. Soil structure and classification of soils. Soil compaction and stabilization. Hydraulic principles of flow through soils, flow nets. Frost action in soils. Effective stresses. Compressibility, consolidation, and settlement analysis.

Shear strength of soil. Kinematics and Stress distribution in soil. Stress analysis and stability of slopes (Prerequisite: 85-218.) (3 lecture, 3 laboratory hours a week.) (Credit cannot be obtained for both 87-315 and 87-355)

87-361. Masonry and Concrete Design
Analysis and design of columns, two-way slabs, and footings. Design of RC bearing walls and retaining walls. Design of masonry units for axial, flexure, and combined loads; Design of masonry beams, flexural and load bearing walls; columns, and pilasters; (Prerequisite: 87-354 or 87-311) (3 lecture, 2 laboratory hours a week.) Credit Weight 4.0: (Credit cannot be obtained for both 87-322 and 87-361)

87-362. Finite Element for Analysis and Design
Limit state design concepts; load factors and combinations; load specifications for structural design calculations.Displacement method for frames; Introduction to the finite element method; computer-aided analysis and design of structures; (Prerequisite: 87-353 or 87-310) (3 lecture, 2 tutorial hours a week.)Credit Weight 4.0: (Credit cannot be obtained for both 87-410 and 87-362)

87-363. Geotechnical Engineering II
Earth pressure and design of retaining walls. Sheet-pile walls, braced and tie back excavations. Combined pressures. Soil bearing capacity. Soil exploration. Load induced pressures and settlements. Footings and eccentrically loaded foundations. Raft and pile foundations. Piles and pile driving, cofferdams and caissons. (Prerequisites: 85-218 and 87-355) (3 lecture, 3 laboratory hours a week) (Credit cannot be obtained for both 87-326 and 87-363)

87-364. Structural Steel Design
Design of structural steel components subjected to axial tension and compression forces, shear force, bending moment, and combined bending and compression; Design of Composite beams -; Design of simple bolted and welded connections; Computer-aided design of steel structures. (Prerequisite: 85-218 and 87-352.) (3 lecture, 2 tutorial hours a week.) (Credit cannot be obtained for both 87-324 and 87-364)

87-365. Transportation and Traffic Engineering
Characteristics of transportation systems; rail, highway, airway, waterway, and pipeline, urban transportation planning, analysis and prediction, traffic impacts studies, highway and intersection capacity, characteristics of traffic flow, traffic control principles, queuing theory. (3 lecture, 2 laboratory hours a week.) Credit Weight 4.0 (Credit cannot be obtained for both 87-314 and 87-365)

87-400. Capstone Design Project
A significant design experience which is based on knowledge and skills acquired in earlier course work. Engineering design integrates mathematics, basic science, engineering sciences and complementary studies in developing elements, systems and processes to meet specific needs while considering economic, health, safety, environmental, social or other pertinent factors. It involves a creative, iterative, and open-ended process Written and oral reports are required. (Prerequisite: consent of the supervisor and Department Head.) (2 hours lecture and 4 hours lab/week (2 terms).) (A 8.00 credit hour course) Credit Weight 8.0 (Credit cannot be obtained for both 87-401 and 87-400)

87-412. Hydraulics *(Discontinued fall 2011)*
Review of basic concepts. Gradually and rapidly varied flows; surface profiles. Design of open channels with non-erodible and erodible beds; steady gradually varied flow computations in prismatic and non-prismatic channels; computer methods including HEC2. Design of hydraulic structures including gravity and arch dams, spillways, and outlet structures. (Prerequisite: 87-351.) (3 lecture, 2 laboratory hours a week.) Credit Weight 4.0. (Cross-listed with 87-472) (Credit cannot be obtained for both 87-412 and 87-472)

87-471. Hydrology
Hydrologic Cycle, Weather. Precipitation: intensity, frequency, duration; Point and area estimates of precipitation; rational methods. Hydrologic abstractions. Runoff: storms, conceptual models, unit hydrograph principles, inflow design hydrograph. Streamflow: gauging, stage-discharge. Channel and Reservoir flood routing. Snowmelt. basics of hydrologic modeling; Probability applications and frequency analysis of precipitation and floods. Groundwater flow and water wells. Hydrologic design of urban and highway structures (Prerequisites: 85-222 and 87-351 or consent of the instructor/ Department Head.) (3 lecture, 2 laboratory hours a week.) Credit Weight 4.0: (Credit cannot be obtained for both 87-323 and 87-471.)

87-472. Hydraulics
Review of basic concepts. Gradually and rapidly varied flows; surface profiles. Design of open channels with non-erodible and erodible beds; steady gradually varied flow computations in prismatic and non-prismatic channels; computer methods including HEC2. Design of hydraulic structures including gravity and arch dams, spillways, and outlet structures. (Prerequisite: 87-351.) (3 lecture, 2 laboratory hours a week.) Credit Weight 4.0. (Cross-listed with 87-412) (Credit cannot be obtained for both 87-412 and 87-472)

87-481. Highway Design and Construction
Geometric design of highways and at-grade intersections; horizontal and vertical alignments, Cross--section elements, drainage; highway soil engineering including soil stabilization; bituminous materials; rigid and flexible pavement design; construction of pavements. (Prerequisite: 85-218 or 87-352.) (3 lecture, 2 laboratory hours a week.) Credit Weight 4.0: (Credit cannot be obtained for both 87-414 and 87-481)

87-482. Planning and Construction Management
The planning portion of this course will cover the elements of proper urban planning, the Planning Act, official plans, zoning by-laws, and subdivision design guidelines. The construction management portion will cover construction industry characteristics; types of business ownerships; organizational structures; drawings and specifications; estimating and bidding; types of construction contracts; insurance, bonding and claims; financial considerations; project cost controls and scheduling; project planning and administration; computer applications in construction industry, quality assurance, and construction safety. (3 lecture, 2 tutorial hours a week.) Credit Weight 4: (Credit cannot be obtained for both 87-325 and 87-482)

Technical Electives

87-491. Foundation Engineering
Footings and eccentrically loaded foundations. Raft and pile foundations. Piles and pile driving, cofferdams and caissons. Soil-structure iteraction. Computer-aided analysis and design of foundations (Prerequisite: 87-355.) (3 lecture hours, 2 laboratory/tutorial hour a week.)Credit Weight 4: (Credit cannot be obtained for both 87-428 and 87-491)

87-492. Advanced Topics in Structural Design
Design of: beam-columns; plate girders; composite structures; and connections. Introduction to Prestressed concrete design. (Prerequisite: 87-355 and 87-364.) (3 lecture, 2 tutorial hours a week.)Credit Weight 4: (Credit cannot be obtained for both 87-422 and 87-492)

87-493. Hydrological and Hydraulic Modeling
Review of hydrologic and hydraulic modeling concepts, inter-linkages between flows and water levels in natural water bodies; Data requirements and sources for various modeling problems; flood risk assessment using models, such as HEC-HMS and HEC-RAS; analysis and design of storm water management system using SWMM, advanced topics in hydrologic/hydraulic design of urban and highway infrastructure (Prerequisites: 87-471, and 87-472 or consent of instructor.) (3 lecture, 2 laboratory hours a week.)

87-494. Transportation Systems Analysis
Socio-economic impacts on transportation, four-stage demand modeling system, use of models in transportation planning and forecasting, data and space issues, regression and discrete choice models; choice of modes, destinations and routes, passenger and freight travel, introduction to land use modeling. (Prerequisite: 87-365) (3 lecture, 2 laboratory hours a week.) Credit Weight 4.0

ENVIRONMENTAL ENGINEERING

Students must have completed at least eight (8) of their 1st year courses before being allowed to register into the 2nd year courses.
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Students cannot register into any of the 4th year courses until they have completed nine (9) 3rd year Environmental Engineering courses and all courses from 1st and 2nd year.

93-351. Thermodynamics
Real gas behaviour and equations of state. The First and Second Laws of Thermodynamics and their applications. (3 lecture hours, 2 tutorial hours a week.)

Credit Weight 4.0 (Credit cannot be obtained for both 93-312 and 93-351.)

93-352. Environmental Chemical Analysis
Environmental site assessment, statistical analysis of environmental data. Important characteristics of air, water, wastewater, and solid wastes. Basic concepts in quantitative analysis of physical, chemical, and biological parameters. Environmental site assessment, statistical analysis of environmental data. Instrumental methods of analysis for organic and inorganic contaminants in air, water, and soil. (Prerequisite: 59-110.) (3 lecture, 2 tutorial/laboratory hours a week.) Credit Weight 4.0. (Credit cannot be obtained for both 93-314 and 93-352).

93-361. Transport Phenomena
Introduction to the unifying theory of transport phenomena. Estimation of viscosities, thermal conductivities, and diffusivities for gases and liquids. Shell balances and some case studies of momentum, energy, and mass-transport. Mass transfer applications involving examples relevant to the environment. (3 lecture, 2 tutorial hours a week.) Credit Weight 4.0: (Credit cannot be obtained for both 93-321 and 93-361).

93-362. Air Pollution Control
Regulations and methods of source testing and monitoring. Nomenclature of organic compounds. Dispersion modelling. Air pollution control methods, designs, and their relative effectiveness. (Prerequisite: 85-250) (3 lecture, 2 lab/tutorial hours per week.)Credit Weight 4.0 (Credit cannot be obtained for both 93-328 and 93-362).

93-363. Water and Wastewater Treatment
Water and wastewater quality, guidelines and standards, flow fluctuation and design capacity. Design of different unit operations and processes in water and wastewater treatment. (Prerequisites: 85-250 and a course in fluid mechanics or hydraulics.) (3 lecture, 3 laboratory hours a week.) Credit Weight 4.5. (Crosslisted with 93-426) (Credit cannot be obtained for both 93-426 and 93-363).

93-364. Materials Recovery and Waste Management
The study, characterization, and analysis of municipal and industrial solid waste systems. Waste reduction, reuse, and recycling. Managing, collecting and transporting solid wastes. Waste reclamation and disposal methods, including landfiling, incineration, and composting. Waste management policies, regulations and facility siting issues. Various assignments will be integrated into a comprehensive project. (Prerequisite: 85-250.) (3 lecture hours.) Credit Weight 3.0 (Cross-listed with 93-414) (Credit cannot be obtained for both 93-414 and 93-364)

93-413. Water Distribution and Wastewater Collection Systems
Quantities of water and wastewater; development of surface and groundwater sources; design, construction, and maintenance of water distribution systems; design, construction, and maintenance of wastewater collection systems. (Prerequisite: 87-351 Fluid Mechanics or equivalent.) (3 lecture, 2 tutorial/laboratory hours a week.) Credit Weight 4.0: (Cross-listed with 93-471) (Credit cannot be obtained for both 93-413 and 93-471).

93-414. Materials Recovery and Waste Management
The study, characterization, and analysis of municipal and industrial solid waste systems. Waste reduction, reuse, and recycling. Managing, collecting and transporting solid wastes. Waste reclamation and disposal methods, including landfiling, incineration, and composting. Waste management policies, regulations and facility siting issues. Various assignments will be integrated into a comprehensive project. (Prerequisite: 85-250.) (3 lecture hours.) Credit Weight 3.0 (Cross-listed with 93-364) (Credit cannot be obtained for both 93-414 and 93-364)

93-400. Capstone Design Project
A significant design experience which is based on knowledge and skills acquired in earlier course work. Engineering design integrates mathematics, basic science, engineering sciences and complementary studies in developing elements, systems and processes to meet specific needs while considering economic, health, safety, environmental, social or other pertinent factors. Written and oral reports are required. (Prerequisite: consent of the supervisor and Department Head.) (2 lecture, 4 lab/tutorial hours per week (2 terms).) Credit Weight 8.0 (Credit cannot be obtained for both 93-409 and 93-400).

93-426. Water and Wastewater Treatment
Water and wastewater quality, guidelines and standards, flow fluctuation and design capacity. Design of different unit operations and processes in water and wastewater treatment. (Prerequisites: 85-250 and a course in fluid mechanics or

hydraulics.) (3 lecture, 3 laboratory hours a week.) Credit Weight 4.5. (Crosslisted with 93-363) (Credit cannot be obtained for both 93-426 and 93-363).

93-471. Water Distribution and Wastewater Collection Systems
Quantities of water and wastewater; development of surface and groundwater sources; design, construction, and maintenance of water distribution systems; design, construction, and maintenance of wastewater collection systems. (Prerequisite: 87-351 Fluid Mechanics or equivalent.) (3 lecture, 2 tutorial/laboratory hours a week.) Credit Weight 4.0: (Cross-listed with 93-413) ((Credit cannot be obtained for both 93-413 and 93-471).

93-472. Chemical Reaction Engineering
Classification of chemical reactions and reactors, the rate equation, ideal reactor concept. Design equations for batch and flow (CSTR and PFR) reactors. Multiple reaction and reactor systems. Reactor design calculations under isothermal and non-isothermal conditions. (3 lecture, 2 tutorial hours a week.)Credit Weight 4.0. (Credit cannot be obtained for both 93-438 and 93-472).

93-473. Environmental Engineering Microbiology
Nature of inorganic and organic pollutants; biological approaches to environmental pollution problems; microorganisms; nutritional requirements and growth; metabolic pathways; energy generation and utilization in biological systems; response to changes in environment; pathogenic microorganisms and disinfection. (3 lecture hours a week, 1 tutorial/laboratory hour a week).

93-481. Sustainability in Engineering
Environmental impact assessment. Biophysical and socioeconomic impacts from engineering activities, processes, and projects. Human health and environmental risk concepts. Introduction to life cycle analysis, corporate/industrial environmental management, and environmental management systems. Students will undertake various project related and problem-based assignments. (3 lecture, 2 tutorial hours a week.) Credit Weight 4.0. (Credit may only be obtained for one of 92-428, 93-428 or 93-481).

93-482 Hydrogeological Engineering
Fundamental physics and properties of groundwater flow in porous geologic material; anisotropy, heterogeneity. Introduction to the theory of groundwater flow; groundwater flow equations and patterns, recharge and discharge, flow nets, aquifer pumping, two-phase flow and well hydraulics. Aquifer development and management. Introduction to chemical hydrogeology and non-aqueous phase liquids, Wellhead protection. Numerical modeling concepts. (Prerequisites: 62-140, 62-141, 87-351 and 87-471, or consent of instructor.) (3 lecture, 2 laboratory hours a week.)

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ELECTRICAL AND COMPUTER ENGINEERING: COURSES

Students must have completed at least nine (9) of their 1st year courses before being allowed to register into the 2nd year courses including all pre-requisite courses required for registration into the 2nd year courses.

[*Note: Students must have completed at least eight (8) of their 1st year courses before being allowed to register into the 2nd year courses including all pre-requisite courses required for registration into the 2nd year courses.]*

88-211. Computer-Aided Analysis
Object oriented programming in C++ covering most of the basic concepts. Development of Classes for matrix operations, complex numbers, etc. The rest of the course covers class development for a set of numerical schemes that include: Gauss-Jordan Method for solving Linear Simultaneous Algebraic Equations; Matrix inversion; Root finding using the Newton-Raphson and the half-interval methods; Lin-Bairstow method for Roots of Polynomials; Least-squares fitting; Numerical Integration using the Trapezoidal and Simpson's 1/3 rule; Solution of Ordinary Differential Equations of any order using Euler, Improved Euler and the fourth-order Runge-Kutta methods. (Credit cannot be obtained for both 85-211 and 88-211.) (Corequisites: 62-215 and 62-216) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-214. Circuit Analysis
Current, voltage, power and energy; simple resistive circuits; Kirchhoff's laws; Wye-delta transformations; techniques of circuit analysis, nodal and mesh analysis; network theorems, superposition, Thevenin's and Norton's theorems; source transformations; operational amplifiers and Op-amp circuit analysis, inductors and capacitors, natural response of first-order RL and RC circuits; natural response of RLC circuits; sinusoids and phasers; ac power analysis; balance three-phase circuits; network simulations using SPICE and MATLAB. (Prerequisite: 64-141) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) (Credit cannot be obtained for both 85-234 and 85/88-124 or 85-234 and 85/88-214.) (Corequisites:62-215 and 62-216). Credit Weight 4.0.

88-217. Digital Logic Design I
Boolean algebra and logic gates; simplification of Boolean functions; arithmetic operations; analysis and design of combinatorial logic circuits with SSI, MSI, and LSI; sequential logic components; registers; counters and memory units; analysis and synthesis of sequential synchronous and asynchronous networks. (Co-requisites: 62-215 and 62-216) (3 lecture, 2 Laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-224. Signals and Systems
Discrete and Continuous-Time Signals and Systems, Discrete and Continuous-Time Linear Time-Invariant Systems, System Analysis in Time Domain, System Analysis in Frequency Domain, Convolution, Differential Equation Models, Fourier series, the Fourier Transform, the Laplace Transform and it's Applications, Sampling of Systems. (Prerequisites: 62-215 and 62-216) (3 lecture, 1.5 laboratory hours and 1.5 tutorial hours a week.) Credit Weight 4.5.

88-225. Physical Electronics
Free electron theory of metals; Fermi level, work function; resistivity; band theory of solids, Fermi-Dirac distribution, density of states; semiconductors, donor and acceptor states; Hall effect; semiconductor devices, Field-Effect Transistors; dielectric materials and devices; semiconductor devices; P-N junction diodes, Metal-Oxide-Semiconductor Field-Effect Transistors (MOSFET), and Bipolar Junction Transistors (BJT). (Prerequisites: 62-215 and 62-216) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-226. Electronics I
Classification of signals; introduction to diodes; rectifier circuits, Zener diode, limiting and clamping circuits; Op amp amplifier configurations, Op amp distortion, non ideal op amp performance; active filters, Tow-Thomas Biquad; Introduction to data converters; oscillators; super-diodes; pulse generation. (Prerequisites: 62-215 and 62-216) (3 lecture, 1.5 laboratory hours and 1.5 tutorial hours a week.) Credit Weight 4.5.

88-228. Electromagnetic Fields
Static electric fields; Coulomb's law, Gauss's law and its applications; electric potential; dielectrics; boundary conditions; capacitance; resistance; steady electric currents, current density, boundary condition for current density, equation of continuity and Kirchhoff's law; power dissipation; static magnetic fields; Biot-Savart's law, Ampere's law; vector magnetic potential; magnetic dipole; magnetic circuits; boundary conditions for magnetic fields; magnetic forces and torque; induction current. (Prerequisites: 62-215 and 62-216) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

Students must have completed all the 1st year courses and at least ten (10) of their 2nd year courses before being allowed to register in the 3rd year courses, including all pre-requisite courses required for registration in the 3rd year courses.

88-313. Electromechanical Systems
Machinery principles; transformers; AC machinery fundamentals; synchronous generators; synchronous and induction motors; DC machinery fundamentals; DC motors; electromechanical energy conversion; three-phase concepts; special-purpose motors. (Prerequisites: 62-215, 62-216, 85-214 and 88-225.) (3 lecture, 2 laboratory hours or equivalent a week.)Credit Weight 4.

88-316. Electronics II
Analog amplification; small-signal modeling of analog circuits; differential-amplifier topology; BJT, MOSFET and JFET differential amplifiers; frequency response and time-dependent circuit behavior; feedback and stability; multistage and power amplifiers; active filters and oscillators; use of CAD in modern transistor circuit design. (Prerequisites: 62-215, 62-216 and 88-226.) (3 lecture, 1.5 laboratory hours and 1 hour tutorial.) Credit Weight 4.25.

88-324. Control Systems I
Transfer function and state-space model for linear time-invariant systems; linearization of nonlinear systems; controllability and observability; transient performance; stability; tracking performance; Proportional-Integral-Derivative (PID) control design; frequency response and root locus (Prerequisites: 62-215,62-216.88-313.) (3 lecture, 1.5 laboratory hours and 1.5 tutorial hours a week.) Credit Weight 4.5.

88-327. Microprocessors
Microprocessor systems (8 and 16 bit) and architecture; data representations, arithmetic units; memory structures; complex instruction set; accumulator, index, and memory reference instructions; addressing modes; stacks, subroutines, and other instructions; interrupts and timing; interfacing I/O devices and data converters; software development systems and assemblers; code implementation on microcontrollers. (Prerequisites: 62-215, 62-216, 88-217, 88-316 and 88-330.) (3 lecture, 3 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.5.

88-329. Analog Communications
Analog communication systems; information measure; signals and noise; Fourier transform and spectra; bandwidth of signals; analog modulation and demodulation systems; AM, FM, TV transmitters and receivers, detector circuits. (Prerequisites: 62-215, 62-216, 85-214 and 88-316.) (3 lecture, 1.5 laboratory hours and 1.5 tutorial hours a week.) Credit Weight 4.5.

88-330. Digital Logic Design II
Contemporary digital system design; programmable logic; device architectures; reconfigurable computing; design entry methods; VHDL (Hardware Description Language); Electronic Design Automation (EDA) tools; combinational and sequential logic design, implementation using programmable logic devices. (Prerequisites: 62-215, 62-216 and 88-217.) (3 lecture, 3 laboratory/tutorial hours or equivalent a week.) Credit Weigh 4.5.

Students cannot register in any of the 4th year courses until all Electrical Engineering courses from 1st, 2nd and 3rd year have been completed.

88-400. Capstone Design Project
Team based design project satisfying the "CAPSTONE DESIGN PROJECT REQUIREMENTS", available from the Department of Electrical and Computer Engineering. Gives the student significant design experience and builds on the knowledge and skills acquired in earlier course work. Provides an exposure to teamwork so as to emulate a typical professional design environment. Computers are to be used both in the execution of the design methodology and the management of the design project. (Prerequisites: completion of all Electrical

Engineering courses from 1st year, 2nd year and 3rd year.) (6 laboratory hours per week; that must be completed over two consecutive winter and summer terms.) Credit Weight 8.0, 2 semester course.

88-410. Directed Study I
The objective of this course is to provide an opportunity for the exceptional fourth-year student with a demonstrated record of scholarship to work in close accord with a faculty member on a project of mutual interest. A written report and oral presentation are required for evaluation by the Department. A Directed Study course may be taken by an eligible student in place of a fourth-year general option course. (Prerequisite: an 11.0 GPA or better in the third year and permission of the Department Head.) (For the purposes of assigning grades and determining averages, 3 lecture hours per week have been allocated to the course.)Credit Weight 3.0.

88-419. Digital Communications
Digital communication systems; discrete Fourier transform; sampling theory; A/D converters; digital modulation; time-division multiplexing; packet transmission; random processes and spectral analysis for digital systems; error probabilities; noise; introduction to information theory. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-420. Directed Study II
The objective of this course is to provide an opportunity for the exceptional fourth-year student with a demonstrated record of scholarship to work in close accord with a faculty member on a project of mutual interest. A written report and oral presentation are required for evaluation. A Directed Study course may be taken by an eligible student in place of a fourth-year general option course. (Prerequisite: an 11.0 GPA or better in the third year and permission of the Department Head.) (For the purposes of assigning grades and determining averages, 3 lecture hours per week have been allocated to the course.) Credit Weight 3.0.

88-431. Control Systems II
Stability and performance analysis in frequency domain; lead-lag control design in frequency domain; elementary observer and control design in state space; z-transformation and z-plane analysis; direct and indirect discrete-time control design; implementation of digital control. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 1.5 laboratory hours and 1.5 tutorial hours a week.) Credit Weight 4.5.

88-432. EM Waves and Radiating Systems
Maxwell equations; time varying potentials; time harmonic fields; electromagnetic wave propagation; wave polarization; power and Poynting vector; transmission lines; Smith chart; rectangular waveguides; waveguide current and mode excitation; dipole antenna; small loop antennas; antenna characteristics; antenna arrays. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 tutorial hours a week.) Credit Weight 4.

88-433. Digital Integrated Circuit Design
Physics and modelling of MOSFETs; fabrication and layout of CMOS integrated circuits; the CMOS inverter: analysis and design; switching properties of MOSFETs; static logic gates; transmission gate logic circuits; dynamic logic circuit concepts; CMOS dynamic logic families; CMOS differential logic families; design methodologies and CAD tools; deep-submicron implementations. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-434. Automotive Electronics
Proportional-Integral-Derivative (PID) controllers and limit cycle controllers; fundamentals of digital control of Spark-Ignition (SI) engine; MPC555 Motorola Power PC/dSPACE based SI engine control system; Motronic engine management system; automotive sensors and actuators; vehicle motion control including Antilock Braking System (ABS); Controller Area Network (CAN); Time-Triggered CAN (TTCAN); FlexRay. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.)Credit Weight 4.

88-435. Microelectromechanical Systems
MicroElectroMechanical System (MEMS) technology overview and design process; microfabrication and process integration; lumped element modeling; 3-D finite element modeling; energy conserving transducers (electrostatics); linear and

nonlinear system dynamics; elasticity, stress, strain, material properties; structure analysis, beams, plates; MEMS sensing and actuation; material case studies; MEMS design methodology; device modeling. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-436. Computer Communications
Protocols and architecture; data transmission; data encoding; interfacing; data link control; multiplexing, ISO reference model; wide-area networks; circuit switching; packet switching; ATM and frame relay; LAN technology and systems; internet protocols; inter-network operation; transport protocols; network security. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-437. Intelligent Computing
Computing models of the human mind. Neural computing models and learning algorithms. Fuzzy set theory and fuzzy systems. Evolutionary computing. Applications of intelligent computing. (Prerequisites:completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year in an Engineering program or fourth year standing in a Computer Science program.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-438. Coding and Information Theory
Abstract algebra, number theory and complexity theory; simple cryptosystems; Shannon's theory; entropy and information theory; data encryption standard, RSA system and factoring; public-key cryptosystems; signature schemes; hash functions; key distribution and key agreement; identification schemes; authentication codes; access structures and general secret sharing; pseudo-random number generation; zero-knowledge proofs (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-439. Multimedia Systems
Multimedia signals: Audio fundamentals; the Human visual system and perception; multimedia data acquisition. Multimedia signal compression: Transforms and subband decomposition; text representation; digital text, audio, image, and video compression. Multimedia signal processing: Digital audio, image, and video processing. Multimedia systems. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-440. Wireless Communications
Introduction to wireless communications; cellular system design fundamentals; propagation path loss; fading and multi-path propagation; modulation techniques; diversity; coding and equalization; speech coding for wireless communications; multiple access networking, wireless communications protocols; satellite communication systems. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-443. Embedded System Design
Embedded hardware and software systems; introduction to embedded systems; custom single-purpose processors, hardware design; general-purpose processors, software, design flow environment and tools, testing and debugging; standard single-purpose processors, peripherals, memory system design; interfacing issues, serial and parallel communication, bus standards, protocols and arbitration; exercises on real world applications; Laboratory implementation on modern Field Programmable Gate Arrays (FPGAs) and microcontrollers using associated Electronic Design Automation (EDA) tools. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 3 laboratory hours a week.) Credit Weight 4.5.

88-444. Analog Integrated Circuit Design
Bipolar and Metal-Oxide-Semiconductor Field-Effect Transistors (MOSFET) technology; device characterization; analog circuit modelling; current sinks, sources, and mirrors; differential pairs; current and voltage amplifiers; differential amplifiers; comparators; operational amplifiers; A/D and D/A converters; Integrated Circuit (IC) implementation with Electronic Design Automation (EDA) tools. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 3 laboratory/tutorial hours or equivalent a

week.) Credit Weight 4.5.

88-445. Power Electronics
Power diodes; thyristors; power Metal-Oxide-Semiconductor Field-Effect Transistors (MOSFET); Insulated-Gate Bipolar Transistors (IGBT); controlled rectifiers; DC-DC converters; inverters; AC-AC converters; gate drive circuits; motor drives; ғ computer simulation of power electronics and motor drives. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-447. Computer Networks Security
Introduction to computer networks security; cryptography; public-key and secret key encryption; encryption algorithms; network security mechanisms and techniques; security protocols; authentication and network security services; traditional and emerging Information Technology (IT) security; cyber-security. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-448. Digital Computer Architecture
Computer Organization and architecture (32 bit); computer abstraction; reduced instruction set; high level to assembler level language translation; pipelinable instruction set architectures; speculation and branch prediction; instruction level parallelism; memory hierarchies, and virtual memory; secondary storage and I/O; multithreading, multicore, multiple CPU, and clustering; Graphics Processing Unit (GPU). (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, **3** laboratory/tutorial hours a week.) Credit Weight**4.5.**

88-449. Sensor and Vision Systems
Basics of sensors and transducers; sensor characteristics and applications; fundamentals of pressure, temperature, displacement and position sensors; accelerometer physics, strain gauges, and torque sensors; machine vision; image processing, image enhancement, edge and corner detectors; image segmentation techniques; image feature extraction and matching; colour models and processing; object recognition and classification; discussion on camera parameters and calibration; stereo vision, 3D range imaging techniques. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours a week.) Credit Weight 4.

88-450. Power Systems I
Principles of operation, modeling and analysis of electric power systems; complex power, phasors and per-unit system; three-phase circuits; power transformer and generator modeling; transmission line parameters; steady-state operation of transmission lines; network matrices and power flow analysis; introduction to alternative energy sources. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-457. Fundamentals of Digital Signal Processing
Discrete time signals and systems models and analysis; Z-transform; discrete Fourier transform (DFT); FFT algorithms; FIR filter design; IIR filter design; stability; realization; hardware and software implementations; digital signal processing applications. (Prerequisites: completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

88-460. Power Systems II
Advanced analytical tools; analysis of abnormal operation, numerical methods, stability and control; transient stability and voltage stability; control and monitoring of power systems; dynamics and control of multi-machine systems; symmetrical faults; symmetrical components; unsymmetrical faults; power system protection and relaying; economic dispatch; optimal power flow; numerical simulation tools in power systems. (Prerequisites: 88-450 and completion of all Electrical Engineering courses from 1st year, 2nd year and 3rd year.) (3 lecture, 2 laboratory/tutorial hours or equivalent a week.) Credit Weight 4.

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INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING: COURSES

1. Students must have completed at least eight (8) of their 1st year courses before being allowed to register into the 2nd year courses including all pre-requisite courses required for registration into the 2nd year courses.
2. Students must have completed all their 1st year courses and at least ten (10) of their 2nd year courses before being allowed to register into the 3rd year Industrial Engineering courses including all pre-requisite courses required for registration into the 3rd year courses.
3. Students cannot register into any of the 4th year courses until all their courses from 1st, and 2nd year have been completed.
4. Students cannot register into 4th year courses if they have more than two (2) outstanding 3rd yr mandatory courses.

91-201. Engineering Management and Globalization
As globalization leads to an internationally integrated production and consumption of goods, cultural products, and services, local and national identities are challenged. Globalization creates both challenges and opportunities for companies providing goods or services. This course discusses the impact of globalization on the industrial and systems engineering discipline, in a multidisciplinary and multi national context. For engineers to competently operate in a globalized environment, they must understand the context, methodologies content and outcomes. Critical thinking, systems thinking, integration of technical and, professional and business acumen is necessary. Stability requires knowledge about understanding the complexity involved and learning to manage it. The course will also deal with: impact on industrial, production, and national systems. It should help prepare students and giving them skills for solving complex systems, and life-long learning and continuous improvement.(3 lecture, 2 laboratory hours a week.) Credit Weight 4.0:

91-302. Health, Safety and Human Factors
Fundamentals of manufacturing safety and health are studied to provide manufacturing engineers with the knowledge to effectively incorporate design solutions for health and safety considerations in the workplace. Human capabilities and limitations in the industrial workplace are also assessed and taken into account when implementing design solutions. Topics will include: machine guards, confined space protocol, accident losses, prevention, liabilities and the Workplace Safety and Insurance Board by-laws, the Ontario Occupational Safety and Health Act, and related standards and codes. Also addressed are ergonomic issues such as the design of the workplace and environment, design of display and control systems and human factors in expanding technology. (Pre-requisite: 85-219) (3 lecture, 2 laboratory hours a week.) Credit Weight 4.0:

91-311. Computer-Aided Design and Computer Aided Manufacturing
This courses focuses on CAD/CAM from theory to practice. Basic and generic design principles and tools are introduced and the course material is complemented with significant hands on practice and engineering applications. Students will learn modelling strategies, and advanced computer aided engineering design, analysis, manufacturing and measurement tools. Topics include: Solid modelling, GD & T, tolerance stack ups, assembly modelling and mechanism analysis, process planning, CNC code generation, tool path optimization and principles of measurement.(3 lecture, 2 laboratory hours a week.) Credit Weight 4.0:

91-312. Operations Research I
Deterministic O. R. models. Linear programming-graphical and simplex methods, duality theory. Transportation, assignment and network models. Sensitivity analysis. Integer programming, branch-and-bound and cutting plane methods, mixed IP algorithms, 0/1 programming. Use of LP and IP computer software programs. Dynamic programming-principle of optimality, stagecoach problems, recursive relationship. (Prerequisite: 62-126.) (3 lecture, 2 laboratory hours a week.)Credit Weight 4.0.

91-315. Product and Process Design
Engineering design and work measurement principals are studied and applied to quantify and reduce the base engineered assembly content of automotive product designs. Non traditional methods for designing and building products for profit are studied with a goal of minimizing total assembly costs, manual labour and

associated ergonomic injuries. Recent advances in manufacturing driven product designs in the automotive industry are presented to educate students on the contributions of product designs to the minimization of assembly costs, assembly labour content and the risk of injuries. (3 lecture and 2 lab hrs per week.)Credit Weight 4.0.

91-317. Systems Analysis and Design
Fundamental concepts, philosophies, and trends that provide the context of systems analysis and design methods. Information systems in terms of common building blocks: Data, Processes, and Interfaces. Basic concept of systems and systems engineering; system representation; system life cycle; system design process; and system design methods. Formulation of decision problems in engineering and management. Decision criteria. Strategies. Utility theory and decision functions. Information requirements of decision-making systems. Methods in systems analysis and design are applied to a wide variety of problem domains. (3 lecture hours and 2 laboratory/tutorial hours a week.)Credit Weight 4.0.

91-321. Manufacturing Process Design
This curriculum provides students with the basic science and engineering science background required to lead the design and manufacturing of products for profit in a globally competitive marketplace. Successful students will understand manufacturing in the broadest sense and emphasis is placed on the basic science of converting select raw materials into quality products anywhere on earth. Successful graduates will know and be able to compare the difference between the mechanical behaviors of materials, select materials for manufacturing based on desirable physical properties and lead the design of the most important manufacturing processes used in industry. The manufacturing processes studied include the engineering science of: metal casting, rolling of metals, forging, extrusions and drawing of metals, sheet metal forming, and the forming and shaping of plastics parts. This course includes the laboratory analysis of the materials and the study of manufacturing processes used to produce automotive components. (3 lecture hours and 2 laboratory/tutorial hours a week.)Credit Weight 4.0.

91-327. Product Quality and Reliability
Impact of quality on manufacturing processes and product design. Methods and theories of statistical process control. Control charts for attributes and for variables. Process capability analysis and six-sigma method. Acceptance sampling and sampling standards. Reliability engineering and various failure models. Failure modes and effects analysis (FMEA). Taguchi method. Product design and quality function deployment (QFD). ISO 9000/ QS 9000 standards. Total Quality Management (TQM) method. (Prerequisite: 85-222.) (3 lecture, 2 tutorial hours a week.)Credit Weight 4.0.

91-391. Supply Chain Engineering
This course explores the basic concepts of managing the flow of materials in a typical enterprise supply chain. This includes the design and operation of manufacturing and warehousing facilities. Students will examine a complete overview of material and information flow, from internal and external suppliers, to and from the enterprise. Topics covered include: basic elements of the supply chain; planning and managing inventories in supply chains; just-in-time; enterprise resource planning; demand and aggregate planning; the analysis of logistics capabilities and transportation issues; and interrelationships among customer service. The impact of e-commerce on supply chain management is also included. The students have the opportunity to explore and use SAP and other software packages. (Pre-requisite: 91-312) (3 lecture, 2 laboratory hours a week.) Credit Weight 4.0:

91-400. Capstone Industrial Design Projects
Students working in teams, and supervised by Faculty, will undertake an industrial design project, eight hours per week. This design course integrates mathematics, basic sciences, engineering sciences and complementary studies in developing elements, systems and processes to meet specific needs of the industrial sponsor. It is a creative, iterative and often open-ended process subject to constraints which may be governed by corporate standards or applicable legislation to varying degrees depending upon the project. These constraints may relate to economic, health, safety, environmental, social or other pertinent interdisciplinary factors.Credit Weight 10.0.* (The Faculty advisor and industrial preceptor will advise the students and evaluate the progress and results of the design project. Students participate in faculty instruction and group meetings. An Oral exam and written engineering design reports (interim and final) are required. (1 lecture hour and 8 industry laboratory hours a week.) [Offered over two terms - a 10.00 credit

hour course])

91-412. Operations Research II
Probabilistic O.R. models. Markov chains and their properties; continuous-time Markov chains. Queuing theory; the role of Exponential and Poisson distributions. Applications of queuing theory in production systems. Markovian decision processes. Reliability. Renewal Theory. Use of computer software programs to solve optimization problems in queues and Markov Processes. (Prerequisite: 85-222.) (3 lecture, 2 laboratory hours a week.)Credit Weight 4.0

91-413. Production Analysis
Analysis and control of production systems. Demand forecasting. Deterministic and stochastic inventory systems. Aggregate planning and master scheduling. Material requirement planning. Operations sequencing and balancing. Job shop scheduling and control systems. Introduction to group technology and flexible manufacturing systems. (Prerequisite: 91-312.) (3 lecture and 2 laboratory hours per week.)Credit Weight 4.0

91-422. Simulation of Industrial Systems
Introduction to Simulation-Random number and variate generation. Applications to queues, inventories and related models. Special purpose simulation languages-SIMAN/ARENA. Input data analysis and model validation. Simulation output analysis, design of experiments. Use of computer software. (Prerequisite: 91-327.) (3 lecture, 2 laboratory hours a week.) Credit Weight: 4.0.

91-428. Facilities Design and Logistics
Approaches to establishing location and layout of space, equipment and services for industrial facilities. Criteria and data for generating & comparing alternatives. Computerized layout planning models, storage systems, AS/RS, Material handling, scope, definitions, and principles, unit load design, types of equipment, flow of material and line balancing. Environmental, human and cost considerations. Electrical and lighting systems and atmospheric systems. (Prerequisite: 91-315.) (3 lecture and 2 laboratory hours per week.)Credit Weight 4.0

91-430. Directed Study
The student will undertake a literature survey and/or a laboratory project in consultation with the Department Head. A written report is mandatory and participation in the Industrial Engineering Program seminars may be part of the requirement. (Prerequisite: fourth-year standing with at least an 8.0 average.) Credit Weight 4.0

91-431. Flexible Manufacturing Systems
Production Systems, Flexible Automation, Computer-Integrated Manufacturing, Group Technology And Cellular Manufacturing, Flexible Manufacturing Systems, Assembly Systems, Materials and tools handling, Robotics In Manufacturing, Principles Of Design For Manufacture, Process Planning And Concurrent Engineering, New Trends-Lean, Agile And Re-Configurable Manufacturing Systems. (Corequisite or prerequisite: 91-413 or equivalent.) (3 lecture, 2 tutorial/laboratory hours a week.)Credit Weight 4.0

91-435. DOE Techniques for Manufacturing
Use of designed experiments (DOE) in engineering product and process design processes. Experiments involving one factor; ANOVA; fixed, random, and mixed models; randomized blocks, Latin squares, and incomplete block designs. Factorial designs. Fractional designs. The Taguchi method and robust product/process design. Emphasis is put on industrial applications of various designs. (Prerequisite: 91-327.) (3 lecture, 2 laboratory hours a week.) (Credit Weight: 4.0).

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MECHANICAL, AUTOMOTIVE, AND MATERIALS ENGINEERING: COURSES

MECHANICAL ENGINEERING

1. Students must have completed at least eight of the ten 1st year courses before being allowed to register into 2nd year courses, including all prerequisite courses required for registration into 2nd year courses.
2. Students must have completed all 1st year courses and at least ten of the twelve 2nd year courses before being allowed to register into 3rd year courses, including all prerequisite courses required for registration into 3rd year courses.
3. Students must have completed all 1st and 2nd year courses and at least ten of the twelve 3rd year courses before being allowed to register into 4th year courses, including all prerequisite courses required for registration into 4th year courses.
4. Taking courses out of sequence can be allowed at the discretion of the Department Head.

92-210. Dynamics
Review of kinetics and kinematics of particles; work-energy and impulse-momentum methods; moments of inertia of areas and masses; kinematics of rigid bodies; plane motion; forces and accelerations for rigid bodies, energy and momentum methods for rigid bodies in plane motion. (Prerequisite: 85-111 or 64-140) (3 lecture, 2 tutorial hours a week.)

92-311. Stress Analysis
Analysis of stresses and strains in simple mechanical structures subjected to combinations of axial, torsion and flexural loads; two-dimensional transformations of stress and strain components; yield and fracture criteria; deflection of statically determinate and indeterminate beams; buckling of columns with various end conditions; introduction to energy methods. (Prerequisite: 85-218.) (3 lecture, 2 laboratory/tutorial hours a week.)

92-317. Applied Thermodynamics
Ideal gas mixtures and psychrometrics. Reacting mixtures and combustion. Power cycles, refrigeration and heat pump cycles. (Prerequisite: 85-212.) (3 lecture, 2 laboratory/tutorial hours a week.)

92-320. Fluid Mechanics II
Navier-Stokes equations and some exact solutions, external flows boundary layer over a flat plate, drag forces; turbulent flows in pipes and mixing length theory, flow measurement, compressible flows and introduction to potential flows. (Prerequisite: 85-233.) (3 lecture, 2 laboratory/tutorial hours a week.)

92-321. Control Theory
Control system concepts, linear modelling and analysis of response and stability of physical systems, complex variables and Laplace transforms, frequency, and transient response analysis and performance specifications. (Prerequisites: 62-215 and 62-216.) (3 lecture hours, 1 tutorial hour a week.)

92-323. Machine Dynamics
Linkages of flexible connectors, cams, toothed gearing, intermittent motion mechanisms, trains of mechanisms, static and dynamic analysis of mechanical flywheels, balancing of rotating and reciprocating masses. (Prerequisite: 92-210.) (3 lecture, 2 tutorial hours a week.)

92-324. Engineering Measurements
Basic concepts in instrumentation; error analysis; instrumentation and measurement systems including sensors, transducer, signal conditioning and display; microcomputer-based data acquisition and analysis. (Prerequisite: 85-222 or 65-205.) (3 lecture, 1.5 laboratory/tutorial hours a week.)

92-328. Heat Transfer
Introduction to the three heat transfer modes: conduction, convection, and radiation. Application of heat exchange equipment.(Prerequisite: 62-216 and semester 6 or higher standing.) (3 lecture, 2 laboratory hours a week.)

92-400. Capstone Design
Student design teams, operating within a "company" environment, utilize the broad range of their undergraduate experience in interdisciplinary projects selected to promote interaction between the mechanical, automotive, and materials programs.

Design methodologies and team interaction simulate future professional practice. Project milestones include: a design proposal with cost analysis and scheduling, construction and commissioning of the designed appartus, and a final report and presentation having both global and detail completeness. (Prerequisite: Semester 7 or higher standing.) (An 8.00 credit weight, 2 semester course.)

92-411. Design for Failure Prevention
Philosophy of machine design. Design factor/reliability relationships. Contemporary fatigue analysis, including low- and high-cycle, triaxial state of non-reversed stress and fatigue damage, with applications of selected mechanical elements. (Prerequisites: 92-311, 92-323, and Semester 7 or higher standing.) (3 lecture, 3 laboratory hours a week.)

92-418. Thermofluid Systems Design
Evaluation of major thermofluid systems: HVACandR, power generation. Factors affecting design and selection of thermofluid devices: boilers, pumps and compressors, valves, piping systems, heat exchangers, evaporators, and turbines. Effect of device characteristics on process efficiency. Application of optimization techniques to thermofluid systems. (Prerequisites: 85-212, 85-233, 92-328; and either 92-317 or 92-320.)

92-421. Machine Design
Gearing and gear trains: spur, helical, worm, and bevel gears. Clutches, brakes, couplings, flywheels. Chain and belt drives. Design of shafting. Student-developed software to support mechanical design. (Prerequisite: 92-323 and 92-311.) (3 lecture, 3 laboratory hours a week.)

92-459. Computer Aided Engineering - CAE
Three-dimensional graphics; fundamentals of finite element methods for problem solving in heat transfer, solids, and trusses using finite element computer programs. (Prerequisite: 92-311.) (2 lecture, 3 laboratory/tutorial hours a week.)

MECHANICAL TECHNICAL ELECTIVES

Some of these courses may not be offered in any given year.

92-315. Mechanical Vibrations
Free, damped, and forced vibration of single and multi-degree of freedom systems with discrete masses. Exact and approximate methods of solution. Vibration isolation, vibration transducers, use of computers in vibration analysis. (Prerequisite: 92-210 and Semester 6 or higher standing.) (3 lecture, 2 tutorial hours a week.)

92-412. Mechatronics
Review of electromechanical components. Practical application of microcontrollers in electromechanical systems. Use of infrared sensors, photoresistors, operational amplifiers, timers, servomotors, and analog/digital converters in mechatronics systems. A hands-on, laboratory-based course.(Prerequisite: Semester 7 or 8 standing for Mechanical Engineering students; other students require instructor approval.) (2 lecture, 3 laboratory/tutorial hours a week.)

92-428. Sustainability in Engineering
Environmental impact assessment. Biophysical and socioeconomic impacts from engineering activities, processes, and projects. Human health and environmental risk concepts. Introduction to life cycle analysis, corporate/industrial environmental management, and environmental management systems. Students will undertake various project related and problem-based assignments. (Cross-listed as 93-428.) (Prerequisite: 85-250 and Semester 6 or higher standing.) (3 lecture, 2 tutorial hours a week.)

92-440. Topics in Mechanical Engineering
Selected topics of current interest in Mechanical Engineering. (Prerequisite: 4th-year Semester 7 or higher standing or permission of instructor.) (3 lecture, 1 laboratory hour a week.)

92-441. Directed Studies in Mechanical Engineering
A special course of studies in Mechanical Engineering with content and direction approved by the Department Head. Although the course may not include formal lectures, it will carry the weight of three lecture hours and 1 laboratory hour per week. (Prerequisite: Semester 7 or higher standing with a 70% average or better.)

92-450. Gas Dynamics
Basic concepts and one-dimensional flow equations of gas dynamics. Emphasis on isentropic flows in variable area ducts as well as Fanno, Rayleigh and

Isothermal flows in constant area ducts. Normal shock waves, their appearance in various flow types, their application in nozzles and diffusers. Oblique shock and Prandtl Meyer expansion waves. Considerations in compressible flow measurements. (Prerequisite: 92-320.) (3 lecture, 1 laboratory/tutorial hours a week.)

92-451. Turbomachines
Dimensional analysis and similitude; definitions of efficiency, two dimensional analysis of axial flow turbines and compressors, three dimensional flow, centrifugal pumps and compressors. (Prerequisite: 92-320.) (3 lecture, 1 laboratory/tutorial hours a week.)

92-453. Heating, Ventilation, and Air Conditioning
Principles of environmental air quality and occupant comfort control. Psychrometric analysis of buildings as applied to common air distribution system designs. Current solar radiation estimation techniques and other energy transfer mechanisms; their application to cooling and heating load calculations. Analytical and numerical calculations. Computational tools. (Prerequisite: 92-317.) (3 lecture, 1 laboratory/tutorial hours a week.)

92-455. Environmental Effects and Control of Noise
Physical properties of sound and noise, measurement of noise, noise control, hearing characteristics and environmental effects of noise. (Prerequisite: Semester 7 or higher standing.) (3 lecture, 1 tutorial/laboratory hours a week.)

AEROSPACE ENGINEERING

94-370. Aerospace Engineering Fundamentals
History of flight and aircraft evolution. Aircraft operating principles. Airfoil and wing aerodynamics. Aerospace propulsion systems (turbojets, turbofans, turboprops, and rockets). Lab on performance estimation and measurement for a turbojet engine. Aircraft design. Weight estimation. Aircraft systems. Aircraft materials and structures. Governance of aviation in North America. Design studies of aircraft or spacecraft and/or components thereof. (Prerequisites: 62-215, 62-216, semester 6 or higher standing; and Aerospace option students or permission of instructor.) (Co-requisites: 92-317, 92-320.)

94-371. Aerospace Materials and Manufacturing
Properties and selection of metals, ceramics, polymers, and composite materials for aerospace applications. Structural and gas-turbine alloys. Machining, casting, forming, heat treating, and joining processes for original manufacture and repair. Manufacture and application of composites. In-service materials degradation. (Pre-requisites: 94-370.)

94-470. Aerospace Propulsion
Application of gas dynamics and thermodynamics to aerospace engines. Analysis of engine cycles. Theory and design of propellers; turboprop engine analysis, Internal combustion and gas turbine engines. Component design for compressors, combustors, afterburners, exhaust nozzles. (Pre-requisites: 92-317, 92-320, 94-370, and semester 7 or higher standing.)

94-471. Aerodynamics and Performance
Analysis of aircraft configurations. Viscous and compressibility effects. Manoeuvering loads and load factors; implications of manoeuverability on thrust requirements. Aircraft stability and control. (Pre-requisites: 92-320, 94-370, and Semester 7 or higher standing.)

94-472. Flight Dynamics and Control of Unmanned Aerial Vehicles
Flight dynamics modelling for fixed-wing aircraft and rotorcraft. Low-Reynolds number considerations applicable to unmanned aerial vehicles (UAVs). Control theory and state-space control schemes. State-space controller design for UAVs. Lab(s) involving control of virtual and/or physical UAV models. (Pre-requisites: 94-370 and 94-471)

AUTOMOTIVE ENGINEERING

94-330. Automotive Engineering Fundamentals
Overview of primary automotive systems. Engine types and configurations, combustion, emission control, vehicle performance. Powertrain, suspension, frame and chassis. Materials and fabrication issues. Engine and vehicle dissection laboratory. Identification of industry issues and trends. (Prerequisite: Automotive Option students only and Semester 6 or higher standing.) (2 lecture, 3 laboratory hours a week.)

94-440. Topics in Automotive Engineering
Selected topics of current interest in Automotive Engineering. (Prerequisite: Semester 7 or higher standing or permission of instructor.) (3 lecture, 1 laboratory hours a week.)

94-441. Directed Studies in Automotive Engineering
A special course of studies in Automotive Engineering with content and direction approved by the Department Head. Although the course may not include formal lectures, it will carry the weight of three lecture hours and 1 laboratory hour per week. (Prerequisite: Semester 7 or higher standing with a 70% average or better.)

94-461. Design for Manufacturability
Expansion of engineering graphics: tolerance design; tolerances for precision fits; tolerance stack-up; geometric dimensioning and tolerancing ((GD&T); design for manufacture and assembly (DFMA). (Prerequisites: 85-230 and Semester 7 or higher standing.) (3 lecture, 1 laboratory hours a week.)

94-463. Vehicle Dynamics
Classification and analysis of suspension types and geometry, powertrain layout, and ride quality. Tire modeling, stability, and numerical simulation of vehicle dynamics, including longitudinal and lateral vehicle response to driver inputs. Selected topics from industry experts. (Prerequisite: Semester 7 or higher standing.) (Co-requisite: 92-315 or 92-321.) (3 lecture, 1 tutorial hours a week.)

94-465. Internal Combustion Engines
Mechanical design of vehicular internal combustion engines for different applications. Covers basic engine types and their operation from an energy conversion systems viewpoint, where the system needs to satisfy a number of requirements. These performance and operational requirements are derived from basic thermodynamics, operation of heat engine cycles, ignition and combustion processes, fuel system design, heat transfer, emissions formulation, available instrumentation and testing procedures. Environmental impact of vehicular designs on global pollution and government standards. Recent developments in energy-efficient and alternate fuel engines. (Prerequisites: 92-317, 92-320.) (3 lecture, 1 tutorial hours a week.)

94-467. Vehicle Thermal Management
A study of controlled passenger compartment environment, and automotive thermal management hardware: radiator, heater core, air-conditioning components. Topics include the thermal comfort model of occupants in a vehicle, determination of heating and cooling loads, the practical application of refrigeration in automotive air-conditioning followed by design of equipment and HVAC system, description and design of engine cooling system. (Prerequisites: 92-317, 92-328, 85-233.) (3 lecture, 1 laboratory hours a week.)

94-469. Diesel Engine Fundamentals
Theory and practice of modern diesel engines. Diesel combustion cycle. Engine design aspects including fuel injection, turbocharging, and intercooling. Measurement and control of engine emissions. Engine performance testing. Future and advanced technologies including exhaust aftertreatment. (Prerequisites: 92-317 and Semester 6 or higher standing.)

ENGINEERING MATERIALS

89-330. Materials and Their Properties
The relationship of the engineering properties of materials to their atomic structure, bonding, crystal structure, imperfections and microstructure. The processing of materials to produce required structure and properties. Includes consideration of crystal structure determination, phase diagrams, diffusion, phase transformations, solidification, heat treatment and deformation. The laboratory is a term-long project designed to familiarize students with the use of materials-related equipment commonly found in industrial and research laboratories. (Prerequisite: 85-219 and Semester 6 or higher standing.) (3 lecture, 2 laboratory hours a week.)

89-331. Thermodynamics and Kinetics of Materials
Thermodynamics: review of First and Second Laws, gas laws, humidity, thermochemistry, entropy, reversible and irreversible processes, equilibrium criteria, Gibbs free energy, activity and activity coefficient, solution thermodynamics, Raoult's and Henry's Laws, Gibbs-Duhem equation, alloy phase equilibria, free energy-composition diagrams, Ellingham diagrams. Kinetics: empirical treatment for homogeneous reaction rates, reaction order and specific

rate constant, activation energy, Arrhenius' Law, energy distribution in reacting systems, heterogeneous reactions. Selected problems in materials processing to illustrate theory. (Prerequisites: 85-212 and Semester 7 or higher standing.) (3 lecture, 2 laboratory hours a week.)

89-420. Ceramic Materials
Uses of traditional and advanced ceramics. Monolithic and composite ceramics. Comparison of ceramics with metals and alloys. Processing: raw material preparation, forming techniques, theory and practice of sintering, quality control. Properties: modulus of rupture, creep, corrosion, erosion, and electrical, magnetic and optical properties. (Prerequisite: Semester 7 or higher standing.) (3 lecture hours, 1 laboratory hours a week.)

89-421. Deformation and Fracture
Introduction to basic plasticity theory and its application to common metal forming and metal cutting processes. Fracture mechanics and its applications in brittle and ductile fracture, creep and fatigue, for purposes of design and of analysis. (Prerequisite: 92-311 and Semester 7 or higher standing.) (3 lecture, 2 laboratory hours a week.)

89-432. Modern Steels
Traditional and advanced high strength steels. Automotive sheet steels. Stainless and tool steels. Cast irons. Steel industry in Canada. Mechanical and microstructural characterization laboratories. (Prerequisite: Semester 7 or higher standing.) (3 lecture hours, 1 laboratory hour a week.)

89-433. Physical Metallurgical Processes
Application of diffusion theory to diffusion-controlled processes; solidification principles and application to foundry problems-segregation in castings; heat transfer processes. Selected problems to illustrate theory. (Prerequisite: Semester 7 or higher standing.) (3 lecture, 1 laboratory hour a week.)

89-434. Polymers
The structure, properties, and processing of polymers (plastics) with emphasis on polymer forming processes, including extrusion, injection molding, blowmolding, and thermoforming, including tours of local industry. Fabrication and properties of composites with a polymer base. (Prerequisite: Semester 7 or higher standing.) (3 lecture hours, 1 laboratory hour a week.)

89-440. Topics in Materials Engineering
Selected topics of current interest in Materials Engineering. (Prerequisites: Semester 7 or higher standing or permission of instructor.) (3 lecture, 1 laboratory hours a week.)

89-441. Directed Studies in Materials Engineering
A special course of studies in Materials Engineering with content and direction approved by the Department Head. Although the course may not include formal lectures, it will carry the weight of three lecture hours and 1 laboratory hour per week. (Prerequisites: Semester 7 or higher standing with a 70% average or better.) (3 lecture hours, 1 laboratory hour a week.)

89-450. Welding Engineering
Design and qualification of arc welding procedures to met the requirements of the ASME Boiler and Pressure Vessel Code. Arc welding processes, weld discontinuities, mechanical and non-destructive testing. Welding metallurgy, base and filler metal classification. Control of hydrogen-assisted cracking, preheat and postweld heat treatment. Fabrication issues. Canadian and international welding codes. (Prerequisite: Semester 7 or higher standing.) (3 lecture, 1 laboratory hours a week.)

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ENGLISH LANGUAGE, LITERATURE, AND CREATIVE WRITING: COURSES

Not all courses listed will be offered each year. All courses are three hours a week (3.0 credit hours) unless otherwise indicated. Students should consult the Departmental office or website for details of Topics and Seminar courses offered in a given year. *Note: English courses 26-203, 26-240, and 26-498 are all double credit (6.0 credit) courses.*

100-LEVEL COMPOSITION COURSES

26-100. Composition
An exploration of the fundamentals of effective writing, including attention to rhetorical concepts of audience, purpose, and context; planning, logical development, and organization; and format and style. (Because of the large number of written assignments and the need for individual instruction, enrollment in 26-100 is limited.) (Not open to students majoring in English.) (Antirequisite: 26-103.)

100-LEVEL LITERATURE COURSES

26-120. Writing about Literature
An introduction to the basic tools for analyzing and writing about literature. Students will be trained in practical criticism of the major genres of literature (poetry, drama, and narrative) and will write a number of critical essays. (Not available on an Audit basis.) (Restricted to majors in English and BAS only.)

26-122. Drama of the Western World: The Tragic Vision
An introduction to tragedy from antiquity to the present, from literary and theatrical perspectives.

26-123. Drama of the Western World: The Comic Vision
An introduction to comedy from antiquity to the present, from literary and theatrical perspectives.

26-128. Women and Literature
An introduction to the ways in which women have been represented and constructed in English literature of various periods.

26-140. Topics in Literature
An introduction to a topic in literature. Topics may include Canadian Aboriginal literature; literature pertaining to topics such as the Bible, the environment, disability studies, film, or music; comparative literatures; or world literatures in English. (May be repeated for credit if the topics are different.)

200-LEVEL CREATIVE WRITING AND LITERATURE SURVEY COURSES

26-201. Topics in World Literatures
This course features world literature in English or in translation drawn from Western and non-Western sources. Historical settings, cultural backgrounds and critical commentaries complement views on cultural diversity and inter-disciplinarity. This course focuses on any of the major genres, including non-fiction and a variety of literary traditions including women's, minority, and ethnic literatures. Topics could include Orientalism, Diaspora writing, as well as African, Asian, Chinese, European, or Middle-Eastern literatures either in English or in translation. (May be repeated for credit if the topics are different.) (Prerequisite: Semester 3 standing and one 100-level English literature course.)

26-202. Topics in Culture and Text
This course will feature studies in English literature with changing emphasis on particular themes, genres, or authors. Topics might include genre studies such as Science Fiction, Children's literature, Detective Fiction, Visual Narrative (*i.e.;* Comics), Environmental Criticism, Disability and Literature, and the Semiotics of media, among others. (May be repeated for credit if the topics are different). (Prerequisite: Semester 3 standing and one 100 level English literature course) (Prerequisite: Semester 3 standing and one 100 level English literature course).

26-203. Creative Writing I
An intensive workshop in various genres. Previous formal creative writing experience is expected. (Portfolio approval is required for admission.) (Not

available on an Audit basis.) (A 6.0-credit, two-term course.)

26-205. Children's Literature
A critical study of selected works of literature written for children, including nursery rhymes, fairy tales, and book-length classics. (Prerequisite: Semester 3 standing and one English-literature course.)

26-210. Early British Literature
A critical study of selected works of major writers of the Medieval, Renaissance, Restoration, and early eighteenth-century periods (from 450 to 1760) (Restricted to English majors only.) (Students may not receive credit for both 26-210 and 26-110).

26-211. Later British Literature
A critical study of selected works of major writers of the Romantic, Victorian, and Modern periods (from 1760 to the present). (Restricted to English majors only.) (Students may not receive credit for both 26-211 and 26-111).

26-260. Canadian Literature
A critical study of selected works of Canadian literature across various genres, regions, and communities. (Prerequisite: Semester 3 standing and one English-literature course.) (Restricted to English majors.)

26-270. US Literature
A critical study of selected works of US literature across various genres, regions, and communities. (Prerequisite: Semester 3 standing and one English-literature course.)(Restricted to English majors.)

26-280. Contemporary Literary Theory
A survey of contemporary literary theory, which may include new criticism, structuralism, poststructuralism, hermeneutics, psychoanalysis, Marxism, new historicism, or gender studies. Explores fundamental critical concepts, with an emphasis on the ways in which notions of reading, textuality, authorship, and subjectivity have developed in Anglo-American and European thought. (Prerequisite: Semester 3 standing and one 100-level literature course in English.) (Restricted to English Majors)

26-285. History of Literary Criticism
Major Works, movements, and ideas in literary criticism from the Greek Classics to the mid-Twentieth century will be covered. This course will help students develop skills in the application of theory as well as the criticism of theory itself. Key schools of thought or movements covered could include Classical, Neo-Classic, Feminist, Humanist, Romantic, Nihilist, Existential, Marxist, and Psychoanalytic, among others. (Prerequisite: Semester 3 standing and one 100-level English literature course.)

26-290. Introduction to Rhetoric
A survey of historical and theoretical aspects of rhetoric from the fifth century BCE to the present, including an examination of the relationship between rhetoric, epistemology, ethics, and politics. (Prerequisite: Semester 3 standing and one 100-level English literature course.)

26-291. History of the English Language
A survey of the background and origins of the English language and its various forms from Old English to the end of the eighteenth century. (Prerequisite: Semester 3 standing and one 100-level English literature course.) (Restricted to English majors.)

26-293. Modern English and Linguistics
A survey of linguistics (the study of languages as systems), with particular emphasis on the English language. (Prerequisite: Semester 3 standing and one 100-level English literature course.)

300-LEVEL CREATIVE WRITING AND LITERATURE COURSES

NOTE: Requirements for all 300 level English Department courses: Semester three standing, and two of 26-120; 26-210 or 26.211.

26-301. Gender and Literature
A study of how gender is constructed in texts from a variety of periods, with emphasis on cultural contexts, feminist theory, and notions of gender and sexuality. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-302. Writing About the Arts (Practicum)
A practicum in writing about contemporary forms of artistic expression. Students will write in multiple genres, exploring connections between art, its social and cultural contexts, and their own experience. Coursework and assignments will be complemented by interactive explorations of a variety of art forms. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-304. Creative Writing II: Special Topics
An advanced workshop featuring a specific genre, approach, or subject. (Portfolio approval is required for admission.) (May be repeated for credit if topics are different.) (Not available on an Audit basis.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-305. Editing Practicum
A practicum in the theory and practice of editing historical, scholarly, and creative works. Students will be directly involved with current editorial projects in the Department. (Permission of the instructor required.) (Not available on an Audit basis.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-306. Publishing Practicum
This course introduces students to theoretical and practical aspects of book production and provides a framework to apply knowledge and skills to concrete projects. Students will oversee the creation of a bound publication working with a finished, edited manuscript. The course will focus on project management, budgeting, author relationships, design, production, publicity, sales and marketing. This course covers the fundamentals of pre-publication planning as well as pre-press and printing production, principles of graphic design, and issues surrounding copyright. The emphasis of the course is on praxis; students are expected to make decisions at each stage of production, from choosing a printing house to determining the best way to promote and market the finished book. Completed projects will be published through a professional Press, or in the format of a scholarly journal. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-307. Writing Hypertext (Practicum)
A study of the aesthetic and textual principles of hypertext and contemporary theories of writing, reading, and textuality. Assignments in web-page creation will provide media literacy and HTML skills. (Not available on an Audit basis.) (1 lecture, 2 lab hours per week.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-309. Scholarship and Bibliography (Practicum)
A study of literary research methods and textual scholarship. Includes practice in research techniques and in bibliographic description, the study of editing procedures, and the examination of the historical and theoretical contexts of textual production. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-310. Middle English Literature
A study of post-1066 Medieval literature, excluding Chaucer. Texts will be read in normalized Middle English. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-312. Chaucer
A study of the major works of Chaucer, including The Canterbury Tales. Texts will be read in normalized middle English. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-314. Topics in Medieval Literature
Studies in Medieval literature, with changing emphasis on particular themes, genres, or authors. Topics might include Old English or Medieval Romance. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-322. Topics in Renaissance Literature
Studies in Renaissance literature, with changing emphasis on particular themes, genres, or authors. Topics might include Milton and Paradise Lost, early seventeenth-century lyric, or literature of the English Revolution. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-323. Sixteenth-Century Non-Dramatic Literature

A study of continuity and change in English literature, culture, and intellectual history in the sixteenth century. Explores canonical and non-canonical poetry and prose by men and women in the context of the European Renaissance and Reformation. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-324. Seventeenth-Century Non-Dramatic Literature
A study of continuity and change in English literature, culture, and intellectual history in the seventeenth century. Explores canonical and non-canonical poetry and prose by men and women in an age of religious, political, and scientific revolution. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-326. Shakespeare I
A study of selected plays to 1600 (early tragedies, histories, and comedies) from literary and theatrical perspectives. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-327. Shakespeare II
A study of selected plays from 1600 (tragicomedies, tragedies, and romances) from literary and theatrical perspectives. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-328. Topics in Renaissance Drama
Studies in Renaissance drama, with changing emphasis on particular themes, genres, or authors. Topics might include Shakespeare in Performance (at the Academy at the Stratford Festival) or drama of the English Renaissance (excluding Shakespeare). (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-333. Restoration Literature
A study of literature in the light of the shifting social, political, and intellectual contexts of 1660-1700. Texts include poetry, drama, fiction, and polemical prose by men and women. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-334. Eighteenth-Century Literature
A study of literature from the Augustans to the Romantics. Texts range from poetry to short fiction to journalistic prose by men and women. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-335 Restoration and Eighteenth Century Drama-
A study of English plays and theatre 1660-1800. Writers may include Etherege, Behn, Dryden, Congreve, Steele, Lillo, Goldsmith, and Sheridan. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-336. Topics in Restoration and 18th-Century Literature
Studies in Restoration and eighteenth-century literature with changing emphasis on particular themes, genres, or authors. Topics might include eighteenth-century fiction, satire, gender and literature, and colonialism. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-343. Early Romanticism
A study of the literature of late eighteenth-century Britain in its historical and cultural contexts. Writers may include Burns, Austen, Blake, Wollstonecraft, Godwin, Walpole, Wordsworth, and Coleridge. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-344. Later Romanticism
A study of the literature of late eighteenth and early nineteenth-century Britain in its historical and cultural contexts. Writers may include Mary Shelley, Keats, Byron, Hemans, P. B. Shelley, de Quincey, and Clare. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-346. Early Victorians
A study of responses to industrialization, urbanization, social reform, gender relations, and late Romantic ideas. Writers may include Dickens, Gaskell, Tennyson, Carlyle, and the Brownings. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-347. Later Victorians
A study of responses to changing attitudes and values in art and society from mid-century to the death of Queen Victoria. Writers may include Arnold, Eliot, the

Rossettis, Hardy, and Wilde. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-348. Topics in Victorian Literature
Studies in Victorian literature with changing emphasis on particular themes, genres, or authors. Topics might include the “Woman Question”, representations of empire, literature of the fin-de-siècle, the Brontës, the working-class question, or Victorian gothic. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-349. Topics in Romantic Literature
Studies in Romantic literature with changing emphasis on particular themes, genres, or authors. Topics might include Romantic biography/autobiography, landscape and representation, Romantic women writers, the Jacobin novelists, Romanticism and race, or the gothic. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-350. Modern Drama
A study of drama from the end of the nineteenth century to the mid twentieth century. Writers may include Henrik Ibsen, Anton Chekhov, August Strindberg, Oscar Wilde, George Bernard Shaw, Eugene O’Neill, Gertrude Stein, Eugene Ionesco, Arthur Miller, and Harold Pinter among others. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-352. Modern British Literature
A study of works published in the first half of the twentieth century. Writers may include Hopkins, Hardy, James, Conrad, Lawrence, Eliot, Woolf, Ford, and Auden. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-353. Contemporary British Literature
A study of works published since the mid-twentieth century. Writers may include Orwell, Jones, Greene, Golding, Spark, Fowles, Pinter, Stoppard, Caryl Churchill, Dylan Thomas, Amis, Larkin, Hughes, and D. M. Thomas. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-354. Literature and Postcolonialism
A study of the literature of nations and peoples responding to various forms of oppression, including colonization, racism, assimilation, and genocide. Introduces relevant theory and focuses on contemporary English-language texts from Africa, the Caribbean, South Asia, North America, and elsewhere. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-355. Modern Irish Literature
A study of works published since the start of the twentieth century. Writers may include Yeats, Joyce, Synge, O’Casey, Clark, Beckett, Kavanaugh, O’Brien, Kinsella, Trevor, and Heaney. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-356. Contemporary Drama
A study of drama from the mid-twentieth century to the present. Writers may include Samuel Beckett, Derek Walcott, Wole Soyinka, Caryl Churchill, Harold Pinter, Cherríe Moraga, David Henry Hwang, Tom Stoppard, Edward Bond, David French, Robert Lepage, among other diverse and popular playwrights, collectives, and performance artists. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-357. Topics in Modern and Contemporary British Literature
Studies in modern and contemporary British literature with changing emphasis on particular themes, genres, or authors. Topics might include literary impressionism, poets of WWI, or the mid-length poem. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-358. Native Literatures and Cultures
A study of literature by First Nations and Aboriginal writers from Canada, the United States, New Zealand, and Australia. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-359. Literatures of the African Diaspora
A study of literatures in English produced by writers of African descent in Africa, the Americas, Canada and the Caribbean. The course may take as its focus a specific period or the development of the literature of a particular area. The course

may include works by writers and theorists such as: Derek Walcott, Wole Soyinka, Toni Morrison, George Elliott Clarke, Ama Ita Aidoo, Frantz Fanon, Paul Gilroy, and Ngugi Wa Thiong 'O. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-361. Topics in Canadian Literature
Studies in Canadian literature with changing emphasis on the literature of a particular region or community, a particular genre, or select authors. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-366. Canadian Poetry
A study of significant modern and contemporary Canadian poetry. Discussion may include questions of form, voice, place, identity, and community. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-367. Canadian Fiction
A study of significant modern and contemporary Canadian short stories and novels. Discussion may include questions of identity, place, form, voice, and community. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-371. Topics in USLiterature
Studies in US literature, with changing emphasis on particular themes, genres, or authors. Topics might include American gothic, 19th-century citizenship, African-American literature, or the Harlem Renaissance. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-372. US Literature: Colonials to Civil War
A study of the emergence and development of US literary identity from the earliest settler writings through to the American Renaissance. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-373. US Literature: Civil War to Realists
A study of innovations in style and subject during the period between the Civil War and World War I. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-374. The US Moderns
A study of US writing in the period between the World Wars, including expatriates in Europe. New styles of poetry, drama, and fiction will be considered in the context of contemporary events.
(Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-375. The Literature of Contemporary America
A study of post-WWII US literature in the contexts of contemporary social and artistic change. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-383. Topics in Literary or Cultural Theory
Studies in selected theories, theorists, or movements and countermovements in contemporary literary theory, cultural studies, or intellectual history. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-395. Topics in Language and Linguistics
Studies in language and linguistics, with changing emphasis on an area or subfield of linguistics (e.g., syntax or sociolinguistics) or of a related field. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-397. Advanced Composition Theory and Practice
A study of the relationship between theory and practice in Composition. Applying theories of Composition and writing in a variety of genres, students will examine how people write and how discourse is produced and circulated. (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

26-399. Topics in Composition and Rhetoric
Studies in Composition and Rhetoric, with changing emphasis on particular aspects of these fields. Topics might include literacy studies, visual rhetorics, or rhetoric and contemporary society. (May be repeated for credit if the topics are different.) (Prerequisite: Semester three standing, and two of 26-120; 26-210 or 26-211.)

DIRECTED READINGS

26-401 to 26-410.

Directed Readings are offered only under exceptional circumstances, and only with the written permission of the Department Head.

SEMINAR COURSES

26-411. Seminar in Medieval Literature
(Prerequisite: Semester 7 standing and ten English courses.)

26-412. Seminar in Renaissance Literature
(Prerequisite: Semester 7 standing and ten English courses.)

26-413. Seminar in Restoration and Eighteenth-Century Literature
(Prerequisite: Semester 7 standing and ten English courses.)

26-414. Seminar in Romantic Literature
(Prerequisite: Semester 7 standing and ten English courses.)

26-415. Seminar in Twentieth-Century British Literature
(Prerequisite: Semester 7 standing and ten English courses.)

26-416. Seminar in Canadian Literature
(Prerequisite: Semester 7 standing and ten English courses.)

26-417. Seminar in American Literature
(Prerequisite: Semester 7 standing and ten English courses.)

26-418. Seminar in Literary or Cultural Theory
(Prerequisite: Semester 7 standing and ten English courses, including 26-280.)

26-419. Seminar in Composition and Rhetoric
(Prerequisite: Semester 7 standing and ten English courses.)

26-420. Special Topics Seminar
(Prerequisite: Semester 7 standing and ten English courses.)

26-424. Seminar in Literature of the Victorian Period
(Prerequisite: Semester 7 standing and ten English courses.)

26-498. Creative Writing III: Seminar
(Portfolio approval is required for admission.) (A 6.0-credit, two-term course.)

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ENVIRONMENTAL STUDIES: COURSES

58-100. Introduction to Environmental Studies
This course introduces concepts, issues, and practices of Environmental Studies, emphasizing social, political, cultural, ethical, and ecological interactions between nature and society and involves concepts and research strategies from across the social and physical sciences. Topics may include conservation and development, forestry management, desertification and agricultural sustainability, energy production and use, the politics and science of global climate change, and the role of geographic scale in framing environmental problems. (Open only to students in the BES program.)

58-110. Humans and the Environment
Humans use energy and resources from our natural surroundings to live, and to develop our societies and cultures. This use has an impact on other animals and plants, and on the air, water, and land. Our impact is now so great that we are in danger of depleting or destroying many of the natural systems on which we depend. This course examines our relationship with the environment: the impact of our activities on the environment, and the natural world's impact on us. Key concepts for understanding this relationship are developed through a survey of current environmental issues, which may include topics such as: resources and sustainability, energy, population growth, globalization, urbanization, food and agriculture, and climate change. (May not be used to fulfill the major requirements for the B.E.S. degree.) (Can be taken as a Social Science option.) (Three lecture hours per week)

58-210. Canadian Regional Environments
Canada is a complex and varied nation. The environmental issues that concern each region of the country are also complex and varied. This course surveys the dominant environmental issues and impacts in each region of Canada, and explores the reasons for the regional variation through a variety of lenses: its physical landscape, its resource opportunities and challenges, its historical settlement patterns and economic development, and its social, cultural, and demographic structure. This context is used to develop an understanding of current environmental news and events across the country. (Can be taken as a Social Science option.) (Three lecture hours per week.)

58-470. Special Topics in Environmental Studies
Students will examine selected environmental topics of current interest, to meet a demonstrated academic need that cannot be satisfied by regular course offerings. This course may be given as a seminar course, or as a directed, self-study course. (Prerequisite: consent of instructor and program counselor.)(Students may repeat the course for credit if the content changes.)

58-480. Environmental Research/Leadership Experience
Students will participate in research and/or leadership training in a field or applied regional, national or international setting, focused on environmental, conservation, and/or sustainability issues. (Prerequisite: permission of program counselor.) (May be repeated for credit if host program or content changes.)
Several regional, national, and international programs invite students to participate in environmental research or leadership training in environmental settings around the world. Academic credits are granted through a host University, and may be transferred to the University of Windsor via a Letter of Permission, arranged before the program begins. Because enrolment in these programs may be limited, and visa or other immigration documents may be necessary for international programs, students should apply as early as possible. For further information, contact the program counselor.

58-499. Environmental Studies Research Project
Each student will be required to carry out an original research project in environmental studies and write a report under the supervision of one of more faculty members. The research topic can be in an area relevant to Environmental Studies (*e.g.*, physical geography, sociology, philosophy, political science, *etc.*) Or be interdisciplinary. (Prerequisite: Restricted to students in the BES program with semester 7 or 8 standing, and with a minimum major average of 73%. Students must consult with an Environmental Studies Coordinator and an appropriate faculty supervisor prior to enrolling in the course.) (6.0 credit hour course which counts as two courses, 2 semester course.)

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FORENSIC SCIENCE: COURSES

57-110. Introductory Crime Scene Investigation
This course will introduce students to the theoretical background of scientific methods used in Forensic Sciences and their practical applications to crime scene investigation within the multidisciplinary Forensic fields. The focus of the course is exploration and examination of evidence found at crime scenes. The students learn the discovery, identification, collection, examination and processing of various types of Forensic evidence.

57-201. Introduction to Forensic Science
This course will survey the many specialties of Forensic Science, including forensic pathology, entomology, anthropology, biology, botany, geology, etc. Special guest lectures by practicing forensic scientists will give students direct contact with the role they play in the extraction and meaning of evidence.

57-210. Crime Scene Evidence Analysis
This course builds upon the protocols developed in the Introductory Crime Scene Investigation (14-57-110) and it is designed to familiarize students with the diverse scientific techniques utilized by Forensic professionals. The techniques for analyses of forensic evidence span natural sciences, social sciences and computer sciences. Pre-requisite: (14-57-110 or 14-57-201 or permission by course instructor).

57-301. Laboratory in Forensic Science
Laboratory methods used by forensic scientists are very broad. This course is a survey of the instruments used and the interpretation of the results. The goal of the course is to familiarize the student with not only the instruments, but also their limitations, and the range of practices employed by professionals for the analysis of evidence. (Prerequisite: 57-201 and enrollment in this course is limited to Bachelor of Forensic Science Program Majors.)

57-302. Expert Witness in Forensic Science
Examination of current concepts and controversies in the collection, preservation, and analysis of forensic evidence, and the role of the expert witness. While exploring various forensic specializations students will practice the presentation of evidence in various formats and contexts including short and long presentations, reports, cross-examination, mock trials, etc. (Prerequisite: 57-201. Enrolment in this course is limited to Bachelor of Forensic Science Program Majors and majors in BA Combined in Forensics.)

57-303. Forensic Identification
Practical application of principles and protocols used in forensic identification. Topics range from the expectations of the public in forensic practices to the legal responsibilities of crime scene specialists for evidence identification. Fingerprint theory and practice, image capture and enhancement, crime scene protocols and management, biometrics, and identification as contrasted to systematics are studied. (Prerequisite: 57-201 and enrollment in this course is limited to Majors in Forensic Science and BA Combined in Forensics.)

57-304. Insect Evidence
Use of insects in forensic investigations covers a range of topics. Students will become familiar with insect taxonomy, anatomy, physiology, behaviour and ecology and apply this knowledge in studying the utility of insects within a legal context. The course will cover the detection, collection, identification and analysis of insect evidence, as well as the current state of knowledge in the use of insect evidence.
(Prerequisites: 57-201, 55-210)

57-313. Digital Photography in Forensic Science
Use of photography in forensic investigations covers a range of techniques. This course builds on students' introduction to forensic photography from 57-303 Forensic Identification. Students will become familiar with different methods of solving problems of focal length, lighting conditions, lens and filter considerations and apply this knowledge in the practical application of crime scene photography. The course will cover the equipment, methodology and preparation of photographic evidence, as well as the current state of technology in the use of digital photography and photographic evidence.

(Prerequisites: 57-303).

57-400. Theory and Practice in Forensic Sciences
Develop a viable research project which may be pursued in 57-402 and possibly during 57-401. Students will also complete projects and assignments to develop skills for working on a complex project as part of a larger team. (Prerequisite: a 300-level Forensic Science course (57-3XX). Enrolment is limited to majors in Forensic Sciences and majors in B.A. Combined in Forensics)

57-401. Practicum in Forensic Sciences
Students are assigned a mentor in the profession of Forensic Science. The student will be required to spend 100 hours during the semester with the mentor. This time will be utilized to develop skills in a laboratory setting or related facility (Prerequisite: A 57-3XX course. Instructor approval required. Enrolment limited to majors in Forensic Sciences and majors in B.A. Combined in Forensics)

57-402. Research Thesis in Forensic Sciences
Research on an approved topic should be original and make a contribution to the body of knowledge known generally as forensic science. (Prerequisite: 57-400. Instructor approval required. Enrolment limited to majors in Forensic Sciences and majors in B.A. Combined in Forensics)

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FACULTY OF ARTS, HUMANITIES, AND SOCIAL SCIENCES (FAHSS): GENERAL COURSES

The following courses are offered through the Office of the Dean of Arts and Social Sciences. The content and focus of the courses listed span several disciplines, rather than being confined to a single area.

01-120. Understanding the Contemporary World
This course will explore current political, cultural and social contexts. The perceived gulf between the "ivory tower" and the "real world" will be bridged each week as we analyze major current issues with attention to popular culture. (Restricted to undeclared majors and students in the Fresh Start program.) (3 lecture/1 tutorial hours a week.)

01-150. Effective Writing I
A foundational course aimed at developing effective writing skills for communicating ideas in academic and other contexts. Topics may include grammar, paragraph writing conventions, academic learning, and critical thinking. This is a hybrid course.

01-151. Effective Writing II
A continuation of 01-150 aimed at developing and refining writing skills for communicating ideas in academic and other contexts. Topics may include grammar, essay writing conventions, research skills, scholarly citations, editing and revising, academic learning, and critical thinking. This is a hybrid course. (Prerequisite: 01-150.)

01-204. Health-Care Ethics through the Life-Span
Explores ethical issues of general interest which arise during the life-span, from conception until death, including methods to prevent contraception, methods to aid in reproduction, medical treatment for children, organ transplantation, research on human subjects, foregoing life-sustaining treatment, advance directives, assisted suicide, and euthanasia. This course is not directed specifically to health professionals.

01-209. Ethics in the Professions
Examines what constitutes a profession, its legitimacy, and its authority from society. The responsibilities of professionals to their clients, professions, and society are mapped. Codes of ethics and other statements of ethical standards, conflict of interest, and the roles of regulatory bodies and governments are examined and related to practice through relevant case studies.

01-210. Ways of Knowing – Selected Topics
This course explores the various ways that knowledge is created, shared, stored, retrieved and used in diverse environments. Students will connect with modernized, historical, and day-to-day examples of ways to manage knowledge. The topic for each year will be announced in advance and might include: an introduction to knowledge management; survey of research methods in the arts, humanities, and social sciences; leadership; diffusion of innovations; collaborative knowledge, and human and online networks. (Restricted to students with a minimum of second semester standing. (Also offered as 02-210.) (May be repeated for credit if the topics are different)

01-220. Investigating the Contemporary World
This course will explore the connections among culture, politics and society in historical and contemporary contexts with the use of case studies. (Restricted to students in the Fresh Start program.) (2 lecture/1 tutorial hours a week.) (Antirequisite: 01-120)

01-250. Exploring the Hebrew Scriptures
An introduction to reading Hebrew biblical literature. Develops the basic skills for investigating literary, historical, and religious dimensions of the text and uses these skills to explore passages selected from the Torah, Prophets, and Writings.

01-310. Ways of Doing: Special Topics
This course introduces students to a range of practices of civic and online engagement. Through collaborative project-based learning, students will develop well-researched and critically informed proposals and/or projects that address

real-world issues and environments. Students will work in small groups to research and present their work in public settings and/or through online platforms. Restricted to students with Year 3 standing. This course is also offered as 02-310. Students may repeat this course for credit if the topics are different.

01-400. Mentorship and Learning
An intensive exploration of the theory an d practice of learning and leadership which includes a practical component where students will mentor first-year students in a first-year course. Mentorship and Learning introduces students to learning theory, learning styles, group facilitation and effective leadership, critical thinking/reading and information literacy. Students will weave theory and practice throughout the semester, leading small group break-outs of first-year students. (Restricted to students in the Faculty of Arts and Social Sciences with at least Semester 5 standing, with consent of the instructor.) (A one-semester, 3-credit course offered in the Fall term.) (Also offered as 02-400.) (Credit can only be obtained for one of 01-400 or 02-400) (3 lecture/~~4~~ 3 lab hours a week.)

02-100. Introduction to Canadian Studies
This course emphasizes the transition of Canada from a European colonial society to an immigrant, multicultural society. A multidisciplinary approach will be taken in dealing with the specific problems facing Canada today.

02-103. Introduction to North American Studies
This course offers an introduction to contemporary North American society and a broad spectrum of current issues and debates. A multi-disciplinary approach will be employed in the examination of North American institutions, social issues, politics, history, and culture. (This course is required for students in the North American Studies Certificate Program.) (3 lecture hours a week.)

02-200. Ways of Doing: Practices of Civic Engagement
This course introduces students to a range of practices of civic engagement. Through collaborative project-based learning, students will develop well-researched and critically informed proposals and projects that address real-world issues and concerns in collaboration with community stakeholders. Students will work in small groups to research and present their work in public settings and through various online platforms.

02-210. Ways of Knowing – Selected Topics
This course explores the various ways that knowledge is created, shared, stored, retrieved and used in diverse environments. Students will connect with modernized, historical, and day-to-day examples of ways to manage knowledge. The topic for each year will be announced in advance and might include: an introduction to knowledge management; survey of research methods in the arts, humanities, and social sciences; leadership; diffusion of innovations; collaborative knowledge, and human and online networks. (Restricted to students with a minimum of second semester standing. (Also offered as 01-210.) (May be repeated for credit if the topics are different)

02-250. Basic Quantitative Methods in the Social Sciences
Introduction to measurement of variables, organization and description of numerical data, testing hypotheses, inference, and interpretation of findings in the Social Sciences. Topics include descriptive statistics, normal distribution, probability, sampling, hypothesis testing, t-tests, correlation, and chi-square tests. (Antirequisite: 65-205, 65-250, 65-251, 73-102, 73-105, 73-205, 85-222, and 95-269.)

02-300. Remembering Canada in the Global Village
An examination of how Canada was constructed as a modern technological society. The course explores how this has been critically analyzed in terms of dependency, both economic and cultural, challenges the analysis, and presents other images and possibilities for being Canadian in the emerging global technological order.

02-310. Ways of Doing: Special Topics
This course introduces students to a range of practices of civic and online engagement. Through collaborative project-based learning, students will develop well-researched and critically informed proposals and/or projects that address real-world issues and environments. Students will work in small groups to research and present their work in public settings and/or through online platforms. Restricted to students with Year 3 standing. This course is also offered as 01-310. Students may repeat this course for credit if the topics are different.

02-350. Practical Strategies for Social Change: Intervening to Prevent Sexual Assault

This course provides male and female students with an introduction to sexual violence as a social problem. The course addresses how this social problem manifests, why it matters, how it persists, and finally, how it can be changed. The importance of personal and community responsibility for social change is emphasized. This course also provides students with the background knowledge that is needed to successfully teach sexual assault prevention education sessions for fellow students, using the *Bringing in the Bystander® In Person Prevention* workshop. Selected students will deliver the workshop by taking Practicum in Social Change (02-450/46-450/47-450/48-451/53-450) the following semester. Restricted to students who have attained a cumulative GPA of 66% or higher at the time of application. (Prerequisite: Semester 4 standing or above and permission of the instructor by online application at uwindsor.ca/bystander.) (Also offered as 46-350, 47-350, 48-350, and 53-351.)

02-400. Mentorship and Learning
An intensive exploration of the theory and practice of learning and leadership which includes a practical component where students will mentor first-year students in a first-year course. Mentorship and Learning introduces students to learning theory, learning styles, group facilitation and effective leadership, critical thinking/reading and information literacy. Students will weave theory and practice throughout the semester, leading small group break-outs of first-year students. (Restricted to students in the Faculty of Arts and Social Sciences with at least Semester 5 standing, with consent of the instructor.) (A one-semester, 3-credit course offered in the Fall term.) (Also offered as 02-400.) (Credit can only be obtained for one of 01-400 or 02-400) (3 lecture/3 lab hours a week.)

02-450. Practicum in Social Change
Supervised practicum in a university setting. Students consolidate and enhance their knowledge of sexual assault and bystander intervention. Students co-facilitate the *Bringing in the Bystander® In Person Prevention* program for one or more small groups of students on campus. The practicum experience equips students to deliver educational content on sensitive issues. (Prerequisite: 02-350/46-350/47-350/48-350/53-351 and permission of the instructor.) (Also offered as 46-450, 47-450, 48-451, and 53-450)

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GEOGRAPHY: COURSES

HUMAN GEOGRAPHY

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42-249. Political Economy of Agrictulture and Food
Study of the physical, cultural, economic, and political factors influencing the spatial patterns and regional problems of world agriculture. (3 lecture hours a week.) (Also offered in Political Science 45-249.)

42-361. Introduction to African Development
A multidisciplinary course introducing students to developmental issues currently confronting African countries and peoples, focusing on the sub-Saharan region. Using a sectoral approach, including health, education, agriculture, and the environment, the course reviews multiple and conflicting approaches to development and addresses both the potentials and the barriers associated with them. (Also offered as Sociology 48-325)

42-392. Urban Systems
Urbanism as a progenitor of economic change is examined from various theoretical perspectives and selected case studies. (3 lecture hours a week.)

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HISTORY: COURSES

Not all courses listed will necessarily be offered each year. All courses are three hours a week (3.00 credit hours).

Some courses are labeled I and II. These numbers are meant to distinguish the subject matter. Except where specifically indicated this does not imply the order in which the courses must be taken.

43-110. Past to Present: Understanding History
This course is specifically designed for first semester history majors, to introduce them to the history department, different kinds of historical inquiry, and the basics of historical research. Further, it is designed to create a cohort of the new history majors, both through participating in this class together and by working in small groups.

43-111 Making History: Methods and Practices
This course is specifically designed for second semester history majors, to introduce them to the methods and practices behind the researching and writing of history research papers. Further, it is designed to create a cohort of the new history majors, both through participating in this class together and by working in small groups.

43-113 Europe Encounters the World: Facing Islam, 8th-15th Century
This course looks at the different forms of contact between Europeans and the rest of the world during the Middle Ages, focusing on conflict and coexistence with Islam. It will consider exchanges between civilizations, whether of an economic, cultural, artistic or spiritual nature. Topics include Muslim Spain, the Crusades, the Ottoman Empire and Venice.

43-114 Europe Encounters the World: The Age of Discovery, 15th-18th Century
This course looks at the different forms of contact between Europeans and the rest of the world during their first period of imperial expansion (15th-18th Century). Special attention will be paid to the discovery, conquest and settlement of India, Asia, and the Americas, as well as the relationship of Europeans with native populations of these continents.

43-123. The World in the Twentieth Century, 1914-1945
An overview of the major events and movements during the first half of the 'short' twentieth century. The course will broadly explore the world-wide impact of the world wars, communism, fascism, colonialism, the Great Depression, etc. The geographical focus of the material will vary with the instructor.(3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

43-124. The World in the Twentieth Century, 1945-Present
An overview of the major events and movements during the second half of the 'short' twentieth century. The course will broadly explore the world-wide impact of the Cold War, communism, decolonization, globalization, terrorism, etc. The geographical focus of the material will vary with the instructor. (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

43-197. Selected Topics
Topics of current interest in history which may vary from year to year. (May be repeated for credit if content changes.)

43-201. Early Modern Europe
A survey of Europe from the Age of Discovery to the French Revolution. Areas of study will include the formation of a world economy, the industrial revolution, the rise of the nation state, popular culture, the Catholic and Protestant Reformations, the printing revolution, the Renaissance, the scientific revolution, and the Enlightenment. (3 lecture hours a week.) (Students cannot receive credit for both 43-115 and 43-201.)

43-202. Modern Europe
A survey of Europe from the French Revolution to the present. Areas of study may include political ideologies, revolution, imperialism, world war, cold war, and European union. (3 lecture hours a week.) (Students cannot receive credit for both

43-116 and 43-202.)

43-207. Early Modern England, 1485-1714
A survey of England's transition from a medieval realm to a modern state. Areas of study may include relations with Scotland, Ireland and Europe, as well as dynastic, religious, and constitutional change. (3 lecture hours or 2 lecture hours/1 tutorial hour a week.)

43-208. Modern Britain, 1714 - Present
A survey of Britain's experience of industrialism, imperialism and post-colonialism. Areas of study may include political and social reform, the world wars, the welfare state, and the European Union. (3 lecture hours or 2 lecture hours/1 tutorial hour a week.)

43-210. Islamic History: Formative Period 600-1000
This is a survey course that examines the development of a distinctive Islamic civilization over the course of four centuries in southern Europe, North Africa, the Middle East, and portions of Central Asia. The lectures will emphasize the following themes: 1) the formation of Islamic civilization as a long-term and gradual process engaged in by the conquering Arab Muslims and their conquered subjects; 2)the diversity of expressions of Islamic culture and religious practices; and 3) the important role played by historical memory in the formation of Islamic culture.

43-211. Islamic History: Consolidation and Expansion 1000-1500
This is a survey course that explores middle period of Islamic history from 1000 to 1500 C.E. This period was one of continuing change and innovation as new political and religious institutions were developed in response to changing conditions and the areas under the influence of Islamic civilization continued to expand, contributing to cultural diversity. Themes of the course that will be emphasized will be structures of premodern civilization, including, for example: 1) the relationship between state and religion; 2) trade and the economies of the increasingly diverse and fragmented Islamic states; 3) the social order and its expression in the urban environment; and 4) the relation between "high" and "low" culture.

43-218. War in the 20th Century
An overview of the evolution of military conflict during the last one hundred years. In addition to traditional military history, this course will introduce many facets of the New Military History, such as the social history of soldiers, life on the homefront, gender and war, etc. (3 lecture hours, or 2 lecture hours and 1 tutorial hour per week.)

43-220 History of Africa , 700-1800
This course is an overview of the major historical shifts in Africa during the pre-modern period (700-1800 AD). Its purpose is to introduce the student to Africa and the Africans: the space and its occupants. Main topics include climatic and linguistic maps, major networks of trade and communication, the cultivation of the `Semitic' heritage (Christianity and Islam) and its impact on African experiences and relations with the rest of the world.(Pre-requisites 43-220 or semester 4 standing)

43-243. Canada from Early European Contacts to the Origins of Confederation, 1600-1867
An overview covering Aboriginal societies, European colonialism, and the emergence of the Canadian federation. Areas may include native-newcomer relations, colonial culture and society, imperial conflict, and the origins of confederation. (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

43-244. Canada since Confederation, 1867 to the Present
An overview of the development of the Canadian federation. Areas may include competing visions of the Canadian "nation", relations with Aboriginal peoples, industrialization and social change, and shifts in politics and political culture. (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

43-246. Aboriginal Peoples in Canadian History: Beginnings to Mid-Nineteenth Century
Aboriginal peoples and their impact on the history of Canada. Areas will include an overview of aboriginal nations, and the changing dynamics of the relationship between the first peoples and Europeans. (2 lecture, 1 lab hour per week.)

43-247. Aboriginal Peoples in Canadian History: Mid-Nineteenth Century to the Present

Aboriginal peoples and their impact on the history of Canada since 1850. Areas will include relations with the state, cultural, land and resource issues, and politics and protest movements.
(2 lecture, 1 lab hour per week.)

43-249. Women in Canada and the United States, 1600-1870
A social history from the period of Native-European contact to the mid-nineteenth century. Work, family and sexuality, cultural ideals, and political status and activism among women of Native, African, and European origins will be examined. (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

43-250. Women in Canada and the United States, 1870-Present
A social history from the mid-nineteenth century to the present. Native, black, immigrant, and native-born white women's roles in paid and household labour, family and cultural life, and reform movements will be examined. (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

43-251. History of Women's Movements in North America
An exploration of the collective action of women in the past and present in North America. Areas of study may include women's involvement with the temperance, civil rights, suffrage, trade union, environmental, reproductive rights, and women's liberation movements. (Also offered as Women's Studies 53-200.) (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

43-261. History of America, 1600-1877
The social, economic, and political history of the British North American colonies and the United States. Areas may include Native-European contact and conflict, the growth of the British Empire, slavery, the American Revolution, industrialization, reform movements, and the Civil War and Reconstruction. (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

43-262. History of America, 1877 to the Present
The social, economic, and political history of the United States since Reconstruction. Topics may include urbanization and immigration, Progressive reform, women's suffrage, the Great Depression, the World Wars, McCarthyism, civil rights and women's liberation, the Vietnam War, and the end of the Cold War (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

43-272. Modern Latin America
Nation-states in Spanish America, Brazil and the Caribbean, from the revolutions of independence to the present. Covers patterns of political and economic development shared throughout the continent. Country and thematic focus may vary from year to year, and may include the Haitian, Mexican, and Cuban revolutions, modern military dictatorships, resources and the environment, and gender and ethnic relations.

43-287. History of Crime
Examines the ways in which crime and criminal justice were shaped by the societies in which they occurred and the ways in which they changed as these societies changed.

43-297. Selected Topics in History
Topics of current interest, which may vary from year to year. (May be repeated for credit with consent of an advisor in History.)

43-301. Culture, Literacy, and the Printed Word in Modern Europe and North America
An introduction to the social, literary and technological aspects of the book in history. Surveys the oral/manuscript culture of Western Europe, assesses the print culture of early-modern and modern Europe and North America, and addresses contemporary publishing. (3 hours per week, lecture and discussion)

43-302. History Workshop
A series of modules that gives students first hand experience in carrying out historical research and exposes them to sources for doing so. Activities may include visiting an archive and cataloguing sources, designing an historical web page, using computers for quantitative research, creating videos

43-303 Schools of Historical Thought
This course is specifically designed to introduce third year history students to a case study in historiography. Each time it is taught, the instructor's specialization will be the theme, and he or she will outline the various historiographical approaches to that theme. (Credit cannot be obtained for both 43-303 and 43-

400.)

43-310. Gender in Islamic History
This course is a historical study of gender in Islamic History, with special emphasis given to the modern Middle East and Afghanistan. We will examine the role of gender systems at different times and places in Islamic history through primary sources. Some themes of the course may be 1) the ways in which discourses of gender were constructed in ways usually disadvantageous to women. Though careful attention must be paid to important differences in time and place; 2) The relationship of gender systems to other hierarchical social structures such as class, ethnicity and age; 3) women and mens' roles in preserving and constructing the gender systems of their society; and 4) the ways in which women and men were able to exercise agency in overcoming or transcending limitations of the dominant discourses on gender.

43-316. The European Renaissance
A study of European intellectual, cultural and artistic life from the 14th to the 16th century. Centered around the notions of Humanism and the revival of Greco-Roman Antiquity, special attention will be given to Italy and the Germano-Flemish lands, but areas of study will also include Spain, France, Eastern Europe, and the Ottoman empire. (Prerequisite: 43-201 or consent of instructor.)

43-320 Africa and the Atlantic System
This course explores the nature and terms of West Africa's interaction with the Atlantic commercial system that materialized after European colonization of the Americas. It revolves around the birth, growth and demise of the Trans-Atlantic Slave Trade (1600s-1800s). The major themes cover the rationale and mechanics of this slave trade, and its impact on the African side of the Atlantic system. Students will be introduced to the general parameters of academic discourses on the Transatlantic Slave Trade and its legacy. (Prerequisite: Semester 4 standing or Permission of instructor.)

43-321. Colonialism in Africa, 1830s-1960s
This course explores the imposition and liquidation of European colonialism in Africa. It focuses on the political, economic, and cultural forces behind colonialism, and the attitudes of its agents. Emphasis will be placed on highlighting the major similarities and differences between European colonial power structures and African resistance to, adaptation to and adoption of those structures. (Prerequisites: 43-220 or semester 4 standing.) (Credit cannot be obtained for both 43-221 and 43-321.)

43-336. Becoming Visible: Women in European History
An introduction to women's status, roles and significance in European history, with emphasis on feminist ideologies and women's movements from the eighteenth- through the mid-twentieth centuries. The geographic focus may vary from year to year.

43-340. Women, War and Peace
This course examines the various and distinct ways in which women experience war and peace, in both historical and contemporary contexts. Topics include home fronts during wartime in both combat and non-combat zones, women's peace activism, displacement, war crimes against women, women in combat, and media coverage of women and war/peace across the 20th and 21st centuries. (Also offered as Women's Studies 53-340.) (Prerequisite: one 200-level Women's Studies or History course or 45-260 or consent of the instructor.)

43-349. Canadian Labour History
The development of the Canadian labour movement and the working-class experience from the nineteenth century to the present. (Also offered as Labour Studies 54-349.) (Prerequisites: semester 4 standing. Labour Studies majors must have Semester 4 or above standing or consent of instructor.)

43-361. Slavery In North America, 1600-1877
The history of racial slavery, including both Amerindians and Africans, the emergence of the concept of "race", male and female experiences, resistance to slavery, British abolition, Civil War, and Reconstruction. The Canadian and U.S. experiences will be compared.

43-362 African Americans/Canadians After Emancipation, 1877 to the Present
The history of racial discrimination, violence, and segregation, struggles for political rights, labour, migration and immigration, and the cultural activity of people of African descent in the U.S. and Canada from the end of American

slavery to the present. Women's and men's lives will be treated equally. (Prerequisite: semester 4 standing.) (Students cannot receive credit for both 43-362 and 43-369.)

43-363. American History, 1945 to the Present
Selected themes in the political and social history of the United States from the end of World War II to the present. (Prerequisite: 43-262 or consent of instructor.)

43-368. North American Popular Culture
An investigation of North American popular culture from the nineteenth century to the present. Topics of study may include sports and masculinity, youth culture, media representations of women, "the Sixties," the impact of cinema and television, and popular music.(Prerequisite: One of 43-244, 43-262, or 43-363 or consent of the Instructor.)

43-397. Selected Topics in History
Topics of current interest which may vary from year to year. (May be repeated for credit with consent of an advisor in History.)

History courses at the 400 level are restricted to History majors and to third- and fourth-year majors in other programs with a History component. Others may register only with the consent of the instructor.

43-400. Historiography
A study of the assumptions, theoretical frameworks, and research strategies in recent historical writing. Topics will vary from year to year, and may include histories of society, culture, and sexuality. (Prerequisites: History major with semester 7 standing, and 43-302.) (Students cannot receive credit for both 43-400 and 43-401 or 43-402.)

43-403. Medicine, Healing and the Health Professions
A social history of medicine, including non-Western and unorthodox traditions, with a cross cultural focus on healers and an emphasis on the evolution of the allied health professions. Topics may include the consolidation of biomedicine, women and indigenous healers, the modern hospital, and the patient's perspective. (Prerequisite: Semester 7 standing or permission of instructor.)

43-408. Culture and Society in Victorian Britain
A thematic approach to Victorian studies. Areas may include labour and leisure, science and religion, history and memory, gender and sexuality, class and national identity, literature and education. (Prerequisite: Restricted to History majors and other students with at least semester 5 standing and permission of the instructor.)

43-411. The Life and Legacy of Muhammad
This course is designed to introduce students to four strands of thought in the history of constructing the life and legacy of the prophet Muhammad. These are 1) the traditional Muslim account of his life, 2) a variety of approaches to the topic by modern social scientists, 3) traditional delegitimizing of Muhammad in historic Western European polemics and their modern equivalents, 4) the role that Muhammad plays in the beliefs and practices of modern Muslims. (Semester 5 standing or above.)

43-414. Architecture, Cities and Urban Society in the Islamic World, 600 to 1850
This course is a seminar that will explore the urban history of the Islamic world. The course will focus our attention on four themes: 1) gender and the city, 2) commerce and the city, and 3) religion and the city, and 4) political authority and the city and the ways in which four aspects of urban life structured the shape of both daily life and the physical shape of the city. (Semester 5 standing or above.)

43-420 Religion and Politics in Modern Africa
This course deals with the intersection between religion and politics in Africa. The main focus of the course is on the role of religion in territorial expansion and political centralization. Comparable examples of the deployment of `providential truth' to legitimize the conquest of space, control of its resources and the management of its occupants in different geographical settings will be introduced, and how it shaped African interactions with Asians or Europeans with comparable ideas about providential truth. (Prerequisite: Semester 5 standing or Consent of Instructor.)

43-435. The Early Modern Atlantic World
This course looks at the foundation, development and interaction of the different European empires (Portuguese, Spanish, French, Dutch, British) in the Americas

and Africa from the 15th to the 18th century. Topics include encounters with Africans and the native peoples of the Americas, cross-cultural exchanges, circulation of peoples, ideas, and commodities, migration, missions, conversion, and slavery.

43-441. Canadian Social History
Everyday experiences of Canadians from the nineteenth century to the present. Areas of study may include labour, women, ethnicity, sexuality, native peoples, leisure and sport, and the environment. (Prerequisites: two courses in Canadian history or consent of instructor. Restricted to History majors and other students with at least semester 5 standing and permission of the instructor.)

43-445. Politics and Society in Industrializing Canada, 1890s-1930s
The impact of modernity on politics and the Canadian state. Topics may include political culture and ideology, political and social movements, and the beginning of state intervention in society. (Prerequisite: Restricted to History majors and other students with at least semester 5 standing and permission of instructor.)

43-446. The Making of Post-War Canada
The changing relationship between the state and society during and after the Second World War. Topics may include the politics of post-war planning, the welfare state, nationalism, and political and social protest movements. (Prerequisite: Restricted to History majors and other students with at least semester 5 standing and permission of instructor.)

43-458. Early American History, 1600-1800
Selected themes in the political and social history of early America, which may include European and Native American contacts, the political and social development of the American colonies, slavery, war and society, the changing status of women, and the American Revolution and its aftermath. (Prerequisite: 43-261 or consent of instructor. Restricted to History majors and other students with at least semester 5 standing and permission of the instructor.)

43-462. United States-Latin American Relations in the 20th Century
The rise and shaping of U.S. power in the hemisphere, with emphasis on Latin American responses. Topics may include military intervention and anti-imperialist movements, cultural and other non-governmental exchanges, and the evolution of inter-American trade. (Prerequisite: Restricted to History majors and other students with at least semester 5 standing and permission of the instructor.)

43-463. History of Gender and Sexuality
This course explores major themes in the history of gender and sexuality. These may include reproduction, contraception, and abortion; gender, race, and power; sexuality and the state; heterosexual relations and marriage; gay, lesbian, and transgender identities. Time period and geographical region will vary with the instructor.)(Prerequisite: Semester 5 or above standing and one of 43-249, 43-250, or 43-251/53-200 or permission of the instructor.)(Also offered as Women's Studies 53-463.)

43-466. History in the Movies
This course treats films as historical documents through which to lens broader social and cultural phenomena. Distinct from *film history*, that is the study of the history of cinema, the course pairs more “traditional” historical research materials, such as academic historical writing and primary documentation, to what became the dominant cultural medium of the 20th century. Films function as both historical artefacts (objects implicitly capturing moments in time) and as historical narratives (mediums explicitly disseminating points of view relevant to the time of production). Engaging with them at both levels, students will be expected to examine the experiences, values, politics, and social identities within a particular period (such as 1970s America) or as related to a specific historical theme (gender, for example) as a means of better understanding the history of the subject. (The topic will vary with the instructor and may be re-taken by permission of History’s undergraduate coordinator.)

43-470. The Era of the Great War
This course will explore the political, military, cultural and social history of the First World War and surrounding period, primarily in Germany, France, and Britain, but including some attention to Eastern Europe, Africa and Asia. The course will address the historiography of the Great War, with a focus on the experience of the war for soldiers, for women on the home front, for artists, and for those under occupation. (Prerequisites: Restricted to History majors with at least semester 5 standing; and restricted to other students with at least semester 5 standing and permission of instructor.)

43-497. Selected Topics in History
Topics of current interest which may vary from year to year. (May be repeated for credit with permission of a program advisor.) (May be repeated for credit with consent of an advisor in History.) (Prerequisite: Restricted to History majors and other students with at least semester 5 standing and permission of the instructor.)

43-499. Research Capstone Thesis
Students will receive training in the methods and skills of advanced historical research, ultimately composing an undergraduate research thesis based on their own original research in the subject area of the course as offered. In the first term of this two-term course, they will identify a practical research topic, perform a review of relevant scholarly literature, and produce a research proposal outlining the topic and identifying a body of relevant research materials, either in manuscript form or available digital archives. In the second term, students will implement the research proposal, spending much of the term engaged in original research. Having collected the relevant research materials, they will write, edit, and revise their final research thesis, the cumulative exercise of the course. The course's specific theme or region/time-period will vary with the instructor. (Pre-requisite: At least Semester 6 standing, and 75% average in History courses or permission of instructor.)

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POLITICAL SCIENCE: COURSES

Political Science 45-100, 45-130, and 45-160 are required of all general and four-year Honours students. It is recommended that these be taken in the first year or as corequisite with 200-level courses. Four-year Honours students are advised where possible to complete 02-250 and 45-275 during their second year. Non-majors wishing to do particular courses as options may do so except where specific prerequisites are stated. Not all courses will necessarily be offered each year. All courses are three hours a week unless otherwise indicated.

45-100. Introduction to Canadian Government and Politics
An introduction to the politics and government of Canada. The course will focus on political culture, the constitution, federalism, the executive, parliament, public service, courts, political parties, interest groups, and elections. (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

45-120. Space, Place, and Scale: Foundations of Human Geography
An introduction to foundational concepts and approaches in the study of human geography, emphasizing the way social, political, economic, and environmental systems shape and are shaped by patterns of geographic and spatial organization.

45-130. Comparative Politics in a Changing World
Introduces students to issues such as democracy, authoritarianism, nationalism, political culture, and how political power is organized. The course focuses on the democratic states of the West, but also examines non-democratic states such as China and the transitional democracies of Eastern Europe. (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

45-160. Introduction to International Relations
An examination of competing perspectives on international relations and of such critical themes as power, security, war, imperialism, nationalism, interdependence, development and underdevelopment, human rights, environmental concerns, and the quest for a new world order. (3 lecture hours or 2 lecture hours, 1 tutorial hour a week.)

45-170. Introduction to Diaspora Studies: There's No Place Like Home
This course introduces students to diasporas-scattered populations living in exile from their ancestral homelands. The course focuses on the significance of migration, exile, belonging, and nostalgia (for ancestral homelands) for diasporas throughout the world. Students submit projects (incorporating oral histories, for example) on the diaspora of their choice. (Also offered as Diaspora Studies 35-170 and Languages, Literatures and Cultures 06-170)

45-201. Current Issues in Canadian Politics
An examination of one or more current issues in Canadian politics, for example, energy and resources, the environment, native peoples, aging, women's rights, urban problems, and health care. (Prerequisite: one of 45-100 or 45-130.).

45-203. Quebec Politics and Society [French]
This course, which is taught in French, introduces students to political life in the province of Quebec, with a focus on the structure and functions of governing institutions, political culture and ideology, and the origins of key political traditions and practices. Topics may include the origins and evolution of Québécois nationalism, the unique position of Quebec in Canadian federalism, provincial policy initiatives to protect and extend the French language in the public sphere, and external relations with Canada and the international community.

45-204. Issues in Quebec Politics [French]
This course, which is taught in French, examines major historical and contemporary political issues in the province of Quebec. Topics may include the patriation of the Canadian constitution, the Quiet Revolution, the FLQ crisis, referenda on Quebec sovereignty, and current public policy issues such as immigration and the environment.

45-205. Contemporary Canadian Political Issues [French]
This course, which is taught in French, examines contemporary issues in Canadian politics. Topics may include, for example, constitutional change, Aboriginal peoples, demographic shifts, the environment, health care and

immigration.

45-211. Women and Politics
An introduction to the principal themes in the study of women in Canadian politics. Topics may include: feminist theory, women in Canadian political institutions, the status of women in the Canadian economy, and gender equality rights in the Charter. (Also offered as Women's Studies 53-211).

45-212. Environmental Policy and Politics
The course examines the domestic and international context of environmental policy-making in Canada. Topics examined may include global warming, Great Lakes pollution, and endangered species.

45-213. Public Opinion, Mass Media and Canadian Democracy
An evaluation of the relationship between public opinion and democratic politics, how opinions, beliefs and attitudes are shaped by the family, educational system, peer groups, and in particular, mass media. Particular attention will be devoted to the role of the mass media in influencing public opinion and public policy.

45-214. Legal Process in Canada
An introduction to the legal system in Canada, including the sources of Canadian law, the general concepts of constitutional and administrative law, the court structure, and the study and practice of law. (Prerequisite: one of 45-100 or 45-130.)

45-220. Introduction to Public Administration
This course introduces students to the political science sub-field of public administration. Building on classical theories of organization, it examines the institutions of government, the dynamics of public sector management, and the relationship between elected officials and administrators in the political system. (Prerequisite: 45-100 or consent of instructor.)

45-221. Canadian Public Administration and Policy
An introduction to the processes of public policy formation in Canada. Includes an analysis of political/bureaucratic relationships, decision making theory, and the role of interest groups in the context of selected contemporary policy issues. (Prerequisite: 45-220 or consent of instructor.)

45-232. Government and Politics of the United States
The organization and structure of national government in the United States, with emphasis upon congressional/executive relationships, political parties, and the electoral process.

45-233. Politics of the Developing World
An examination of the politics of developing areas, with a focus on economic and political development, ethnic conflict and the role of overseas development assistance in building government institutions. In given years, emphasis may be on Africa, Asia or Latin America and the Caribbean.

45-235. Government and Politics in the Middle East
The course provides an overview of the politics of the contemporary Middle East. Particular attention will be paid to state and regime formation, the legitimacy of Middle Eastern governments, state society interaction, the nature of the opposition, and prospects for democratization and improvements to human rights.

45-241. Contemporary African Politics
Characteristic domestic and international problems of African states south of the Sahara, including resource scarcity, ethnic diversity, political stability, and relations with the Great Powers.

45-244. Government and Politics in Europe
Examines contemporary issues such as democratic development, nationalism, and regionalism, immigration and racism, the status of women, social welfare programs, and the consolidation and expansion of the European Union.

45-245. Contemporary Issues in International Relations
This class will focus on some of the key contemporary issues in international relations. Students are expected to have some background knowledge of world politics, particularly developments in the last few decades. Issues to be examined may include economic globalization and its effects, the future of the state system, capitalism (and its challengers) as a model of economic production, development assistance, the US role in global politics, Iran’s nuclear program, and climate change. [The pre-requisite for the class is 45-160 (Introduction to International

Relations].

45-248. The political economy of mass media
This course will explore the role of media as a political force in democratic societies. Corporate media's role in politics and governance is the starting point for looking at what role media play in North American political culture. Communication policy, the role of public relations and advertising, and the exercise of power among the media. political realm and the general public are examined.

45-249. Political Economy of Agriculture and Food
Critical examination of shifts in the political economy of agriculture and food, focusing on political, economic, social, and environmental changes occurring in and affecting agro-food production and consumption systems.

45-251. Classical Political Thought
An introduction to the history of political thought from the ancient Greeks to the end of the Middle Ages. Topics may include human nature, justice, natural law, and the relationship between Church and State.
(Prerequisites: 45-100 and one of 45-130 or 45-160.)

45-252. Modern Political Thought
Toward the new science of politics from Machiavelli to Rousseau and the French Revolution.

45-255. The Politics of Music
This course will explore the relationship between music and politics. Historical perspectives and critical popular culture theory will inform a look at the rise of politically themed music, how the music industry deals with political themes in music, music and social movements, and music as hate politics, music and patriotism.

45-260. Politics, History, and Asian Religions
An introduction to Hinduism, Sikhism, Jainism, Buddhism, Taoism, Confucianism, and Shinto, with attention to their role in history and politics.

45-261. Politics, History, and Western Religions
An introduction to Judaism, Zoroastrianism, Christianity, Islam, and BaHai, with attention to their role in history and politics.

45-264. Introduction to Canadian Foreign Policy
An overview of the formulation and trends of Canadian foreign policy from World War I to the present, together with an examination of the domestic and external determinants of Canadian foreign policy and of the foreign policy making process. (Prerequisite: 45-100, or 45-160, or consent of instructor.)

45-267. Strategic Studies
An examination of the theories, tools, and concepts that explain war and how international violence can be used for political ends. The focus will be primarily on the modern state system, especially on the post-WWII environment. Among topics to be addressed are theories of war, deterrence, arms control, the "democratic peace" thesis, and proliferation of weapons of mass destruction. (Prerequisite: 45-160 or consent of the instructor.)

45-268. International Organizations
An introduction to the problems and possibilities of international co-operation and global governance among states and non-state actors. The course will provide a survey of various international organizations. These may include the United Nations, NATO, the European Union, and NAFTA. The role of non-governmental organizations in world politics is also examined. (Prerequisite: 45-160 or consent of instructor.)

45-270. Information Searching and Analysis
This course is designed to help students become better at analyzing and critiquing information from a variety of sources. We will take a critical look at internet searching and learn to use those resources in more intelligent ways. The focus will be on researching a topic through both the internet and more traditional sources Students will learn how to assess the information contained in websites and how to assess a variety of things which appear as information.

45-275. Introduction to Research Methods
Introduces students to quantitative and qualitative social research. Looks at how surveys and focus groups are used and abused for political and commercial purposes. Examines what field and archival research can teach us about human behaviour and social, political, and economic trends. (Prerequisite: 02-250.)

45-288. Selected Topics: Current Political Issues
Selected topics based on current political issues. Topics may vary from year to year. (May be repeated for credit if content changes.)

45-309. Canadian Provincial Government
A comparative study of provincial governments and politics in Canada including an examination of the powers exercised by provinces, the institutions of provincial government and the behaviour of provincial electorates and politicians. In given terms, Ontario, Quebec, the Atlantic or the Western provinces may be given particular attention. (Prerequisite: 45-100 or consent of instructor.)

45-314. Constitutional Law and Politics in Canada
The nature and purpose of constitution and major issues in Canadian constitutional politics. Topics may include judicial review, the development of human rights law in Canada, and the impact of the Charter of Rights on Canadian politics and government. (Prerequisite: 45-214 or consent of instructor.)

45-320. Political Parties and Elections
An analysis of the development and functions of parties and of the social, psychological, and political influences on voting in Canada.

45-321. The Legislative Process
An introduction to representative democracy, parliamentary behaviour, and legislative process. May include role-playing exercises and a simulation of the Federal House of Commons.

45-323. Government and Business
An introduction to the intricate relationship of government to business. Included are: government services to business; business and policy development; and regulation and/or de-regulation and regulatory agencies. (Prerequisite: 45-100 or consent of instructor.)

45-324. Public Infrastructure
This course examines the role of the public sector in the ownership and operation of major capital facilities for transportation, water, sanitation, electric power, health care and education. Topics include alternative funding mechanisms, environmental impacts and regulations, public consultation and the influence of political interest groups, and the role of infrastructure in the economy. The course also provides an introduction to analytical methods used to support infrastructure decision-making.

45-326. Local Government
An introduction to the politics and administration of local government. Topics include local political structure, relationships between municipalities and other levels of government, public policy-making, and current challenges facing local officials. (Prerequisite: 45-100)

45-335. Political Geography
A systematic examination of the relationship between politics, power, and geography, with focus on the political meanings, uses, and representations of geographic space, and the significance of geography for understanding the organization and exercise of political power at local, regional, and global scales. (prerequisites: 45-120).

45-346. Asian Government and Politics
Comparative analysis of institutions and political processes of Southeast Asia, South Asia, China, or Japan.

45-351. Topics in Political Thought
The study of selected topics in political thought and theory. Students are recommended to take 45-251 or 45-252 before taking this course.

45-354. Political Problems of Economic Development
The course takes a comprehensive approach to the study of economic development, drawing connections between theory (including development paradigms) and practice. In given years, the focus may be on South-East Asia, Central Asia, Africa, China, Eastern Europe, or Latin America. (Prerequisite: 45-160 or consent of instructor.)

45-355. Political Economy of International Trade
An examination of the most prevalent dilemmas facing the global trading system. The main focus is on the World Trade Organization and its global agreements on goods, agriculture, services and intellectual property. Additional topics include

regional trade blocs, international trade in money, foreign direct investment, and environmental and labour issues. (Prerequisite: 45-160 or consent of instructor.)

45-356. Theories of International Political Economy
An examination of the major theoretical perspectives in the field of international political economy. This course will cover both classical and modern theories, including mercantilism, liberalism, Marxism, feminism and post-modernism. (Prerequisite: 45-160 or consent of Instructor.)

45-360. International Conflict and Its Resolution
The nature of conflict and how it is managed in the international community; explicit and tacit bargaining strategies and techniques of conflict resolution. (Prerequisite: 45-160 or consent of instructor.)

45-361. U.S. Foreign Policy
The United States policy-making process and the substance of policy in relation to the former communist world, developing countries, and allies such as Canada and Western Europe.

45-363. Principles of International Law
An introduction to the role of international law in international relations, this course will consider the role of justice in the international system and will examine the basic principles of modern international law, including sources, subjects, and procedures. (Prerequisite: 45-160 or consent of instructor.)

45-367. The Politics of the European Union
Examines the development and operation of the European Union. Key issues on the agenda of the European Union are examined, including: the introduction of the single currency; the development of a common foreign and security policy; and the possible enlargement of the European Union. The extent to which the European Union challenges existing state structures is examined throughout the course.

45-370. Africa and the African Diaspora
The course explores the experiences and relationships that Africans, Afro-Caribbeans, Black-Canadians, and African-Americans have with their host countries and their ancestral homeland-Africa. Topics may include the myth of a monolithic African Diaspora, slavery (forced migrations), exile, colonialism, Eurocentrism, Afrocentrism, "Back to Africa" movements, and multiple interpretations of Blackness. (Prerequisite: 45-170.)

45-371. Millenarian Movements
This course focuses on religious and political movements that anticipate an imminent end to the current order, and the initiation of the millennium (for example, the Nation of Islam, National Socialism, Christian Identity), and the impact of these groups on society.

45-372. Religious Fundamentalism and Politics
A study of the modern concept of religious fundamentalism, with case studies of the interface of fundamentalism and politics in North America, Europe, Africa and Asia.

45-373. Islam and Politics
The course develops an understanding of the complex relationship between Islam and politics in both historical and contemporary settings as well as an awareness of the diversity of interpretations among Islamic thinkers and activists concerning the political nature and role of Islam. Topics include the notion of an Islamic state, jihad, Shari'a, the interaction between Islam/Islamism and democracy, human rights, nationalism, international relations.

45-378. Promotional Culture and Democracy
This course focuses on the role promotional culture plays in democratic processes. Moving beyond classical conceptions of propaganda, promotional culture incorporates a range of tactics and strategies used to persuade citizens or sell to consumers. While political and issue advertising play increasingly large roles, the interplay between journalism and promotional culture will also be a nexus of concern for the course. (Prerequisite: 45-100)

45-379. Politics and Culture
An examination of political themes as reflected in different forms of popular culture, including cinema and the media. Topics may include: war and cinema, and how commercial interests are portrayed in mass media. While the course may focus on different forms of cultural expression, the emphasis will be on

understanding and evaluating how politically relevant themes are influenced and shaped for the mass public.

45-393. Public Service Management Internship Seminar
A critical examination of selected theories and concepts applicable to research and management practices in the public sector. (Admission by consent of a program advisor.) (Must be taken concurrently with 45-492.)

45-399. Practicum in Government and Politics
Practical work in the office of an elected or appointed official, with oral and written reports to the supervising faculty member. (To be taken only with permission of instructor and a program advisor in Political Science.)

45-411. Canadian Politics: Participation and Processes
A review of current literature on topics that may include parties, elections, voting behaviour, pressure groups, representation, new social movements, public opinion, and ideologies. (Restricted to Semester 7 and 8 Political Science majors.)

45-412. Canadian Federalism
A review of current literature and development on such topics as federalism, intergovernmental relations, and the role of Quebec. (Restricted to Semester 7 and 8 Political Science majors.)

45-421. Seminar in Canadian Public Policy
A detailed analysis of the Canadian public policy process. (Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors.)

45-422. Seminar in Public Policy Analysis
A survey of the evaluative side of public policy including formulation, adoption, program operations and evaluation techniques.(Restricted to Semester 7 and 8 Political Science majors.)

45-431. Seminar in Comparative Politics
A comparative examination of national political systems emphasizing areas such as political culture, political parties, elites, and interest groups. In given terms, the focus may be on industrialized or developing countries. (Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors.)

45-434. Seminar in Politics of the United States
An analysis of selected topics in United States politics and government. May include an examination of foreign perspectives on U.S. politics, Canadian-U.S. relations, parties and elections, civil liberties and civil rights, or other important topics in United States politics. (Restricted to Semester 7 and 8 Political Science majors.)

45-440. Remaking North America: Geographic Perspectives on US-Canada Politics
The political geography of the United States and Canada, in regional and global context, focusing on the political, cultural, and economic factors and processes shaping the two countries' internal political character, external relations, and bilateral relationship. Topics covered may include regional political cultures in the US and Canada, political and economic integration under NAFTA, American and Canadian electoral geographies, comparative analysis of immigration policy, and the meaning of the US/Canada border in the context of globalization. (Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors. Students are recommended to take 45-120 before taking this course).

45-451. Seminar in Contemporary Political Theory
An examination of selected topics in political theory, with special emphasis on the literature of the twentieth century. (Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors.)

45-461. Seminar in Theories of International Relations
A survey of competing perspectives and approaches employed in the contemporary study of international relations. (Restricted to Semester 7 and 8 International Relations majors)

45-462. Interdisciplinary Approaches to Research in International Relations
A research oriented seminar that will encourage the use of interdisciplinary perspectives in the examination of selected problems in international relations. (Restricted to Semester 7 and 8 International Relations majors.)

45-464. International Political Economy
An overview of the major theoretical perspectives and issues in international political economy. Issues addressed may include: international trade, foreign investment and multinational corporations, international monetary institutions, and crisis and change in the international system. (Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors.)

45-465. Seminar in Globalization
A critical overview of major theories, debates, and case studies related to the politics of globalization. Specific topics addressed may include changes in the nature of state sovereignty, the creation and regulation of a global economy, and cultural change and resistance. (Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors. Students are recommended to take 45-120 before taking this course).

45-470. Human Rights in a Global Context
This course provides an insight into international Human Rights (HR) concepts, their theoretical/legal framework, and their applicability in today's world, as well as an awareness of some of the relevant themes and debates surrounding HR issues. Themes include the philosophical foundations of HR, promotion or violation of HR, and HR in the world of politics, universality versus cultural relativism, and the possible dichotomy between individual and collective or group rights. (Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors.)

45-488. Selected Topics in Political Science
Topics of current interest which may vary from year to year. (May be repeated for credit with the permission of a program advisor in Political Science.)(Restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors.)

45-492. Public Service Management Internship Practicum
Supervised work experience in a public service management environment. (Admission only by consent of program advisor.) (Offered on a Pass/Non-pass basis only.) (Must be taken concurrently with 45-393.)

45-495. Advanced Topics in Canadian Foreign Policy
This seminar will focus on issues that are driving the contemporary Canadian foreign policy agenda. Members of the seminar will read and discuss recent research on topics including Canada’s defence and security policy, trade and aid policies, environmental record, as well as more recent foreign policy initiatives. Students are expected to learn through active participation in the class. Students are also expected to have some background knowledge of both Canadian history and Canadian government and politics. The course is restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors. Students must have taken 45-160 (Introduction to International Relations) before taking this course. While not a pre-requisite, it is also recommended that students take 45-264 (Introduction to Canadian Foreign Policy) before this class, although the instructor will permit students into the course without it.

45-496. Advanced Topics in International Security
This seminar will focus on issues that are driving the contemporary fields of strategic and security studies. Members of the seminar will read and discuss recent research on topics including Canadian and American defence and security policy, proliferation, the arms trade, energy security, and changes in military strategy. Students are expected to learn through active participation in the class. Students are also expected to have some background knowledge of global politics and some understanding of recent conflict. The course is restricted to Semester 7 and 8 Political Science majors and Semester 7 and 8 International Relations majors. [Students must have taken 45-160 (Introduction to International Relations) before taking this class. While not a pre-requisite, it is also recommended that students take 45-267 (Strategic Studies) before this class, although the instructor will permit students into the course without it.]

45-499. Directed Reading in an Approved Special Field
Intended for students with special interest in areas not covered in sufficient depth by other courses. (To be taken only with permission of instructor and a program advisor in Political Science.)
(May be repeated for credit if content changes.)

Fall 2015 Undergraduate Calendar

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KINESIOLOGY: COURSES

Not all courses listed will necessarily be offered each year.
Kinesiology "Core" courses are restricted to students registered as Kinesiology majors.
For Kinesiology major courses (300 and 400 level) non-Kinesiology majors may be admitted only with the permission of instructor.
All courses are three hours a week (3.00 credit hours) unless otherwise indicated.

95-103. Movement Science Perspectives
This course will present an overview of the biophysical sub-disciplines that comprise Kinesiology. Treatment of each sub-discipline will highlight the history of the area, the current state of research and the practical application of principles in Kinesiology to sport, the workplace and activities of daily living. (Open only to non-Kinesiology majors.)

95-104. Introduction to Kinesiology: Sport Management and Sociocultural Perspectives
This course will present an overview of the sport management and sociocultural sub-disciplines that comprise Kinesiology. Treatment of each sub-discipline will highlight the history of the area, the current state of research and the practical application of principles in Kinesiology to sport, the workplace and activities of daily living. (Open only to non-Kinesiology majors.)

95-200. Health and Wellness
This introductory course will examine health and wellness from both a local and global perspective. Personal health and wellness will be evaluated from a physical, mental, spiritual and social perspective. Behavioural change and motivational techniques will be explored to aid in achieving a healthier lifestyle. This course will introduce various topics that impact the health and wellness of an individual including physical activity, nutrition, obesity, stress, disease prevention, high risk behaviour, health care systems, alternative medicine, violence in society and the environment. Current health and wellness issues within the community and media will also be presented. (Open to Kinesiology majors only.)

95-205. Introductory Exercise Physiology
The focus of this 1st year course in exercise physiology is to introduce students to the various physiological systems of the human body and how they respond to acute and chronic bouts of physical activity. The course will highlight how the human body responds to accommodate the exercise stimulus and the benefits of exercise. Designed to stimulate interest in the Movement Science area of our program. (Open to Kinesiology majors only.)

95-210. Human Performance
An examination of the role perception and cognition play in our ability to sense, attend to, process, and transmit information during the performance of any motor skill. The course will focus on an information processing approach to examine the processes that underlie our ability to perform motor skills.

95-211. Principles of Mental Skills Training
This course surveys the psychological principles underlying cognitive techniques that can be used to improve performance and enjoyment in physical activity environments such as sport and exercise. Among the topics to be explored will be goal setting, anxiety control, and attentional focus.

95-222. Introduction to Leisure
This introductory course examines leisure and leisure delivery in Canada. Various ways of defining leisure are examined, both historically and for different groups of Canadians, as well as the benefits and challenges of leisure in everyday life. The history of leisure delivery in Canada is then reviewed, as well as current approaches and challenges to leisure delivery. (Open to Kinesiology majors only.)

95-224. Introduction to Occupational Biomechanics/Ergonomics
This introductory course will examine topics in occupational biomechanics/ergonomics. The goal of the course will be to provide the tools, skills, and knowledge to perform basic ergonomic assessments. The course will focus on human productivity and risk of injury of specific tissues in the workplace. (Open to Kinesiology majors only.)

95-225. Ethics in Sport and Physical Activity
A philosophical analysis of sport and physical activity with emphasis on ethical aspects. Ethical theories will be studied as a basis for assessing and understanding decisions and actions of coaches, athletes, officials, and executive members. Case studies covering problem areas will be utilized to enable the student to analyze these decisions and actions. (Credit can not be obtained for both 95-225 and 95-320)

95-230. Sociology of Sport and Physical Activities
An examination of the relationship between sport and society from a variety of perspectives. This examination will include the interaction of sport with other societal institutions and with various social determinants.

95-240. Historical Perspectives on Physical Activity and Sport in Western Civilization
This introductory course presents an overview of the significance of physical activity and sport in Western Civilization from ancient Greece to the present by specific reference to selected topics in different eras through which the particular society may be examined. Within this framework, the relationship of physical activity and sport to such factors as economics, politics, and religion will be emphasized, as will its contribution to the culture.

95-250. Principles of Sport Management
An introduction and analysis of the effective approaches governing the organization and administration of physical activity and sports programs. Areas of study involve management and programming of physical education and sports programs; finances and budgets; equipment and supplies; planning of indoor and outdoor facilities; time management; and public and human relations.

95-260. Physiology of Fitness
An introduction to the physiological systems and the adjustments seen as a result of exercise and exercise training. General topics areas include examination of how aerobic and anaerobic metabolism operate and respond to exercise energy demands, cardio-respiratory responses and adaptations, body composition, and training principles.

95-265. Functional Anatomy
An in-depth study of the human musculoskeletal system. Emphasis will be placed on the components of skeletal, muscular, and nervous systems. Joint articulations will be covered in detail. (2 lecture, 2 laboratory hours a week.)

95-269. Measurement and Evaluation
An introduction to descriptive and basic inferential statistical techniques with special emphasis on evaluation of data in the various Kinesiology sub-disciplines. (2 lecture, 2 laboratory hours a week.) (Antirequisite: 02-250.)

95-270. Research Design
A preliminary course to acquaint the student with proper experimental designs and research paper writing. Statistical interpretation and application are included. Current research topics will be included. (2 lecture, 2 laboratory hours a week.)

95-280. Fundamental Mechanics of Human Motion
Presents the quantitative fundamentals of mechanics as they apply to movements of the human body and the sport implements it handles.

95-285. Human Growth and Development
A general analysis of the physical, physiological, and psycho-motor development of the individual from conception to adolescence. Special emphasis will be placed on identifying age-appropriate physical activities for children.

95-299. Co-op Work Experience I
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course cannot continue in the co-op program.)

95-301. The Use and Abuse of Drugs
A concentrated study of the actions and effects of drugs, with special emphasis on the use, abuse, and/or involvement of drugs in today's sporting world.

95-302. Exercise and Fitness Psychology
An examination of the psychological processes by which healthy and unhealthy behaviours related to physical activity develop and the methods by which behavioural change can be encouraged. Emphasis will be placed on exercise, nutrition, and injury as factors in health-related physical fitness.

95-303. Imagery Effects on Performance
This course will be an examination of imagery use in various performance domains (*e.g.,* sport, exercise, rehabilitation, work). Emphasis will be placed on both the theory and research used in the examination of the effects of imagery. (Prerequisites: Open to 3rd and 4th year Kinesiology majors.) (Open to non-majors if there is enrolment space.)

95-304. Sport Nutrition
This course will (1) examine the fundamental concepts of nutritional science applied to health, exercise, and sport, (2) develop an understanding of the relationship between diet and sports performance, and (3) apply sports nutrition principles to exercise science. (Open to Kinesiology students in the Movement Science stream; open to Kinesiology students in the Sport Studies and Sport Management streams provided they have at least 3rd year standing; also open to all other students provided they have at least 3rd year standing and permission of instructor.) (Credit may not be obtained for 95-304 and Special Topics courses covering the same content.)

95-306. Obesity and Eating Disorders
This course will provide a multidisciplinary approach to understanding of the current epidemic of obesity and eating disorders in Canada and its impact on disease development throughout the lifespan. Particular emphasis will be on translating basic science findings related to body weight to intervention and prevention strategies. (Open to Kinesiology students in the Sport Studies and Movement Science streams; open to Kinesiology students in the Sport Management stream provided they have at least 3rd year standing; also open to all other students provided they have at least 3rd year standing and permission of instructor.) (Credit may not be obtained for 95-306 and Special Topics courses covering the same content.)

95-310. Motor Learning and Control
An examination of the processes which underlie the acquisition and control of goal directed human movement. Emphasis will be placed: 1) the factors that affect learning (feedback, attention, memory) and, 2) the simultaneous integration and coordination of body parts involved in movement execution and control. Laboratory experiences will focus on the application of theoretical premises to activities of daily living. (2 lecture, 2 laboratory hours a week.)

95-311. Psychology of Leisure
This course examines the psychological aspects of decisions to begin, persist at, and withdraw from leisure activities of interest to physically active people. Among the topics to be discussed will be fitness and nutritional behaviours, recreational sport, traditional forms of movement such as dance and the martial arts, travel and tourism, and the relationships of all of these to the world of work.

95-333. Applied Sport Psychology
An examination of the processes by which individual and team athletic performance can be enhanced using mental training techniques based on applications of cognitive and social psychology. Emphasis will focus on individual attentional, anxiety and affect management, and team dynamics.

95-340. History of the Modern Olympic Movement
An examination of the historical development of the Modern Olympic Movement. Areas covered include politics, nationalism, gender, commercialism, marketing, and amateurism. The contributions of various athletes and administrators who have helped to shape Olympic history will also be assessed.

95-345. Sport Marketing
An application of marketing concepts and activities to the sports domain. Topics include product development, promotions, advertising, publicity, pricing, licensing, market segmentation, and research, as well as the development of a marketing plan for a sport/recreation organization.

95-350. Organizational Behaviour
An introduction to the social psychological parameters of sport administration. This course will focus upon the integration of decision-making, communication,

administrative behaviour, motivation, satisfaction, authority, conflict, etc., as each interacts and contributes to improve the effectiveness of the administrative process.

95-351. Strategic Planning of Sport Events
A study of the strategies and techniques involved in planning and running various intramural-recreational, extramural, and sport events for different environments in the community. Special emphasis will be given to scheduling; pre-event preparation; management of events; program of activities; personnel involved; and structuring tournaments and competitions.

95-352. Sport Finance
Introduction to basic theory in finance, budgeting, and accounting applied to the management of sport organizations. Topics may broadly include: financial issues in sport, financial systems and how they operate, types of business structures, basic accounting principles, capital structuring and other sources of revenue, principles of budgeting, taxation, financial ratio analysis, break-even analysis, time value of money, and various other financial concepts as applicable.

95-355. Socio-Economic Aspects of Sport and Leisure
An introduction to the interaction of sport and economics. A socio-economic approach is taken to examine such topics as the demand for sport and leisure activities, and sport consumer behaviour.

95-360. Physiology of Exercise
To examine the biochemical/physiological systems of the body responsible for maintaining optimal utilization/biosynthesis of metabolic intermediates during rest, acute exercise, prolonged exercise, and altitude. Also to examine the interaction of metabolism, ventilation, and kidney function during rest/exercise challenges in particular acid-base balance at sea level and altitude. (2 lecture, 2 laboratory hours a week.)

95-362. Human Factors and Work Performance
This course will introduce students to the effects of human factors on performance in the workplace. Human performance at work will be explored as a function of: information processing; memory and attention; anthropometry and human variability; health and safety; shift scheduling; the design of displays and controls; and environmental factors including lighting, sound, vibration, and temperature.

95-370. Scientific Basis of Conditioning
A study of current concepts in conditioning theories and physiological evaluation. Included in this course are assessment techniques, program design, and other factors affecting physical performance. (2 lecture, 2 laboratory hours a week.)

Enrollment in Practice, Theory, and Analysis courses (95-381 through 96-398) is restricted to third- and fourth-year Kinesiology majors, with Semester 7 and 8 majors being given preference up to any enrollment limit. Space permitting, non-Kinesiology students may take these courses with permission of the instructor.

95-381. Practice, Theory, and Analysis of Urban Outdoor Recreation
Utilizing sociological, historical, and philosophical viewpoints this course examines the concept of wilderness, specifically within an urban setting. Using Essex County as the "urban setting," students will explore the breadth of possible recreation activities available and consider their relevance to a broader understanding of recreation, wilderness, and ourselves. (2 lecture, 2 laboratory hours a week.)

95-382. Practice, Theory, and Analysis of Golf
Combining physical and analytical techniques this course will assist students to understand and execute golf skills, enhance their abilities in error detection and correction, understand strategy and course management, and be aware and appreciative of golf rules and etiquette. (Additional fee applies.) (2 lecture, 2 laboratory hours a week.)

95-383. Practice, Theory, and Analysis of Hockey
Combining physical and analytical techniques this course will assist students to understand and execute hockey skills, enhance their abilities in error detection and correction, and understand and apply the strategies to the offensive, neutral, and defensive zones. (Additional fee applies.) (2 lecture, 2 laboratory hours a week.)

95-388. Practice, Theory, and Analysis in Football
The performance of selected football skills with a special emphasis on an applied mechanical analysis. Also involved will be an indepth study of modern offensive and defensive teams and the kicking game. Other areas of study will concentrate

on scouting practices and practice planning principles. (2 lecture, 2 laboratory hours a week.)

95-391. Practice, Theory, and Analysis of Dance: Sociocultural Study of Dance
A study of the origins, historical development, and function of dance in Western society. Practical laboratory experience will be given in folk, ballroom, and contemporary dance material. (2 lecture, 2 laboratory hours a week.)

95-392. Practice, Theory, and Analysis of Basketball
This course combines improvement of individual offensive and defensive skills, application of mental and physical training principles by which basketball performance can be enhanced, rules of the game, and awareness of strategic concepts by which individuals and teams compete. (2 lecture, 2 laboratory hours a week.)

95-394. Practice, Theory, and Analysis of Volleyball
Combining physical performance and analytical techniques, this course will assist students in the understanding of skill execution for each of the components of volleyball, enhance their ability to identify and correct errors in execution of skills, and apply the skills to the offensive and defensive strategies of the game. (2 lecture, 2 laboratory hours a week.)

95-395. Practice, Theory, and Analysis of Aquatics
This course introduces students to the main components of aquatics. It will assist them in understanding the basic execution of the various swimming stroke. Students will develop their ability to identify and correct errors in the execution of swimming skills, plus be introduced to the basic aspects of water safety and lifesaving skills. (2 lecture, 2 laboratory hours a week.)

95-397. Practice, Theory, and Analysis of Track and Field
This course introduces students to the science of track and field. They will be introduced to all track and field events and the progressions associated with each event. Students will be expected to illustrate basic movements for each event and analyze skill movements for all track and field events. (2 lecture, 2 laboratory hours a week.)

95-398. Practice, Theory, and Analysis of Physical Fitness
This course introduces students to the main components of fitness instruction. Anatomy, exercise physiology, program design, leadership, and safety will be reviewed with direct application to fitness instruction. Students will have the opportunity to develop the ability to apply theoretical information to practical exercise experiences. (2 lecture, 2 laboratory hours a week.)

95-399. Co-op Work Experience II
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a cooperative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course cannot continue in the co-op program.)

95-400. Human Movement and Aging
An examination of the physiological, sensory, muscular, and cardiorespiratory mechanisms underlying age-related changes in human movement and motor control. These issues will be explored from cellular to whole-body perspectives incorporating current theoretical approaches to aging. Emphasis will be placed on integrating the role of physical activity into explaining age-related changes in cognition and activities of daily living.

95-402. Sport Tourism
Sport tourism is one of the largest and most important segments of the travel and tourism industry. With a focus on the global sports environment, this course will introduce students to the fundamentals of sport tourism, including the creation, impacts, and future trends of sport tourism development. Students will critically examine the economic, socio-cultural, and environmental impacts of sport tourism as well as the motivations of sport tourists. Finally, this course will instruct students on marketing and development principles of sport tourism products and services. (Prerequisite: Open to Kinesiology students in the Sport Management stream; open to Kinesiology students in the Sport Studies and Movement Science streams provided they have at least 3rd year standing; also open to all other

students provided they have at least 3rd year standing and permission of instructor)

95-404. Population Health
This course will examine the factors that aim to (1) improve health of the entire population and (2) reduce health inequalities among population groups. Particular emphasis will be on the Canadian health care system and the determinants of health, in addition to personal health practices and health knowledge, health policy, and behaviour change theory as it applies to the health of our society. (Prerequisite: Open to Kinesiology students in the Sport Studies stream; open to Kinesiology students in the Movement Science and Sport Management streams provided they have at least 3rd year standing; also open to all other students provided they have at least 3rd year standing and permission of instructor) (Credit may not be obtained for 95-304 and Special Topics courses covering the same content.)

95-405. Gender Issues in Sport
A comprehensive overview of the status of women in sport with a view towards understanding the influence of gender upon women and men as consumers of sport in North American culture.

95-408. Dynamics of Skill Acquisition
This course will introduce students to the theoretical and empirical data underlying dynamic systems "theory". Specifically, it will examine the notion of "self-organization"; individual and environmental constraints on action and the evolution of skilled motor behaviour; and discuss practical applications of this theory to normal and pathological motor activity. (Prerequisite: Open to Kinesiology students in the Movement Science and Sport Studies streams; open to Kinesiology students in the Sport Management stream provided they have at least 3rd year standing; also open to all other students provided they have at least 3rd year standing and permission of instructor)

95-410. Physical Activity for Special Populations
An examination of populations that have special needs in the area of physical activity (sensory, cognitive, musculo-skeletal impairment). Emphasis will be placed on defining the characteristics of the population, the needs and strengths of each population, and matching the strengths with the appropriate physical activities. Issues of integration, programming, and environmental adaptation will also be considered. Laboratory experiences will focus on the application of the theoretical information. (2 lecture, 2 laboratory hours a week.)

95-433. Selected Topics in Sport Leadership
The course examines sport leadership from a variety of theoretical perspectives that include both interpersonal and intrapersonal perspectives. The course will expose you to current research and literature relating to leadership in sport. The course will examine the role of the sport leader and how to become an effective sport leader. Students will develop specific leadership skills that are of interest to them and practice these skills in exercises and class projects. The emphasis will be on applying psychological concepts to your sport leadership experiences. (Prerequisites: Open to 3rd and 4th year Kinesiology majors.) (Open to non-majors if there is enrolment space.)

95-440. History of Sport in Canada
An examination of the issues and topics related to the historical evolution of sport in Canada. Areas of study include methodology, social class, geography, immigration, native sport, urbanization, industrialization, religion, gender, economics, and government involvement.

95-450. Human Resources in Sport Management
An introduction to the tools and systems available for effective decision-making in sport organizations. Topics include sport planning, employee selection and evaluation, time management, compensation, benefits, labour relations, career planning, and problem solving.

95-451. Sport and the Law
Introduces students to the principles of law as they relate to Human Kinetics. The principles of law will be related to sport or athletic administration, and to instruction and supervision as it relates to physical and health education and field activities, interscholastic and intercollegiate programs, as well as, other recreational and leisure pursuits.

95-452. Sport and Government

An analysis of national and international sport in the context of government involvement at the provincial and national levels.

95-453. Perceptual-Motor Development
This course examines motor skill development of children and adolescents, bringing together theoretical perspectives from psychology, biology, genetics,neuroscience, and sociology. An interdisciplinary perspective is used to study the interaction of developmental processes. The emergence, development, and assessment of selected perceptual-motor skills will be examined in detail. (3 hours a week.)

95-454. Co-operation and Conflict in Sport
Group interactions in athletics tend toward conflict. An investigation of sport and athletic organizations, their goals, methods of attaining these goals, and obstacles to such achievement. Special emphasis on individual and group interactions.

95-455. Global Issues in Sport Management
This course provides future leaders and managers with strategies to address globalization issues in the field of sport management. The course uncovers how the social, political, cultural, economic, and technological dimensions in the global context affect the management practices of leaders in sport and leisure organizations. It will also cover how sport (developmental sport and high performance sport) is organized in different countries. Topics such as commercialization and internationalization of sport will be addressed, as well as the increasing political involvement in sport, the global media-sport complex, the migration of athletes, and the global business of sport. (Pre-requisite: Kinesiology Student)

95-456. Sport Communication
This course provides a comprehensive survey of the practices and techniques used for effective communication in the sport industry. Topics covered will include the development and delivery of an effective campaign, the use of mass and social media, crisis management, and public relations. (Prerequisites: Open to 3rd and 4th year Kinesiology majors.) (Open to non-majors if there is enrolment space.)

95-461. Chronic Disease and Exercise Rehabilitation
This course is designed to provide a broad understanding of: 1) the physiological processes involved in the development of selected chronic diseases (*e.g.,* cardiovascular, respiratory, cancer, autoimmune) and disorders (*e.g.,* Huntington's disease), 2) the risk factors associated with their development and progression, where applicable, and 3) how exercise rehabilitation can be used as a tool for intervention, including past, current and emerging exercise recommendations. (Prerequisites: Open to 3rd and 4th year Kinesiology majors.) (Open to non-majors if there is enrolment space.)

95-462. Exercise in Extreme Environments
Humans are a remarkably resilient species in the face of widely varying environmental conditions. In fact, humans inhabit nearly every corner of the earth (and beyond) and manage to survive and work in the extremes of cold, heat, pollution, atmospheric and water pressures, and even extreme g-forces and microgravity. The purpose of this course is to introduce students to the physiological responses to exercise (including work or play) under extreme environmental conditions and some of the countermeasures, both physiological and outside the body (*e.g.,* clothing) humans use to protect ourselves in these environments. (Prerequisites: Open to 3rd and 4th year Kinesiology majors.) (Open to non-majors if there is enrolment space.)

95-458. The Endocrine System in Sport, Exercise and Health
The endocrine system, in close association with the nervous system, is an important regulator of physiological homeostasis. Various components of the "milieu interieur" or internal environment must be maintained for a "free and independent life". Exercise induces several metabolic and physiological challenges to which the endocrine system must respond in order to maintain this internal environment. Thus, this course will introduce students to the mammalian endocrine system and then examine how exercise and health affect and are affected by the endogenous hormones and chemical messengers of the human body. (Prerequisite: Open to Kinesiology students in the Movement Science stream; open to Kinesiology students in the Sport Studies and Sport Management streams provided they have at least 3rd year standing; also open to all other students provided they have at least 3rd year standing and permission of instructor)

95-460. Cardiovascular Physiology
The study of the cardiovascular system, anatomy, electrophysiology, mechanics, and responses to stressors. (2 lecture, 2 laboratory hours a week.)

95-463. Applied Neurophysiology
Mechanisms underlying human movement in healthy, diseased, aged and trained states will be examined by studying the integrated actions of the neural, somatosensory and motor systems. Emphasis will be placed upon sensory transduction, reflexes and the descending motor system.

95- 464. The Pathophysiology of Pain
Pain is a phenomenon encountered in many of the sub-disciplines of kinesiology. This course is designed to give students an awareness of the functional significance of pain. This course will focus on the physiology and anatomy of pain from nerve endings in peripheral tissue to synaptic transmission in the central nervous system. Factors that affect pain perception, including pharmacological and non-pharmacological treatment modalities and psychological aspects of pain, will also be discussed. (Open to Kinesiology majors only.)

95-465. Ergonomics and Injury-Prevention
Examination of topics in applied ergonomics as they pertain to reducing the risk of musculoskeletal injuries in the workplace. Students will gain practical experience in applying quantitative and qualitative ergonomic assessment tools. Topics include: the mechanisms of upper limb and low back injuries, the principles of redesigning operations to reduce injury risk, and techniques for optimizing the feasibility that ergonomic changes will be implemented. Includes experience in an occupational setting. (2 lecture, 2 laboratory hours a week.)

95-471. Physiological Basis of Sports Therapy
A physiological examination of athletic injuries and their therapy. Topics to include the prevention of and pathology of injuries, as well as the care of injuries and rehabilitation techniques. (Additional laboratory fee applies.) (2 lecture, 2 laboratory hours a week.)

95-473. The Social Construction of Leisure
An examination of leisure as a social activity which is shaped by various societal institutions and social relations.

95-475. Individual Studies
The student will select an approved topic and under direction investigate and report on it. (Prerequisite: consent of the instructor is required at least three weeks prior to the end of the Fall or Winter term preceding the term in which enrollment is anticipated.) (Hours to be arranged.)

95-476. Principles of Coaching
A critical study of various issues that confront the modern-day coach. Areas of study involve effective coaching techniques; person attributes; motivation and discipline approaches; dealing with problem athletes; and coach-player communication. Stress will be placed upon developing a sound beginning philosophy of coaching, along with looking at the coach as a professional person.

95-477. Outdoor Recreation
Through guided discovery and experiential learning, this course provides knowledge about the outdoors as an alternative recreational medium that fosters deeper awareness of nature, wilderness, and ourselves. Offered in the Fall term before the start of classes. (Prerequisite: demonstrated swimming competence.) (Additional fee applies.)

95-480. Advanced Biomechanics
Introduces students to advanced concepts and techniques required in quantitative biomechanical analysis. (2 lecture, 2 laboratory hours a week.)

95-485. Group Dynamics in Sport
The central purpose of this course is to explore individual human behavior in a sport and physical activity context from a group dynamics perspective. Emphasis will be placed on understanding group-based psychological concepts which are pertinent to the field of sport and physical activity.

95-490. Special Topics
Courses in which current topics associated with Kinesiology are examined.

95-491. Laboratory experiences in Biomechanics and Ergonomics
This advanced laboratory course will provide students with the opportunity to

become familiar operating common laboratory equipment in the field of biomechanics and applied ergonomics. Practical experiences will include direct force measurements, video analysis and manual digitizing software, linear and angular kinetics/kinematics, force plate data acquisition, biomechanical analysis, and electromyography. Students will also develop the skills required to assess and modify common workstations and hand-tools found in the workplace to minimize musculoskeletal demands and help prevent injuries in the workplace. (Prerequisites: Completion of all required first and second year Kinesiology courses. Open only to Movement Science Majors.)

95-492. Laboratory Experiences in Human and Exercise Physiology
The focus of this laboratory course is to apply the basic principles of human performance in the areas of exercise physiology and athletic therapy. Students will be introduced to laboratory equipment commonly used in the field of Exercise Science to measure physical fitness levels including cardiovascular and metabolism function during exercise. Students will also perform health related fitness appraisals involving screening tools, blood pressure and body composition measurements, aerobic and musculoskeletal fitness assessments and fitness program prescriptions. This course also evaluates common athletic injuries, their taping requirements and subsequent modalities, which aid in recovery. (Prerequisites: Completion of all required first and second year Kinesiology courses. Open only to Movement Science Majors.)

95-493. Laboratory Experiences in Motor Learning and Psychology of Physical Activity
This advanced laboratory course introduces students to common laboratory equipment and evaluation tools/checklists used to assess motor control, motor learning and sport psychology. Students will gain practical experience in applying both classical and recent methodological protocols, collecting common measurement variables and evaluating personal results. Topics from motor behaviour include: error measurements of motor performance, movement examinations, postural assessments, video analysis and an evaluation of Fitts' law. Topics from sport psychology include: coaching behaviour assessments, effects of anxiety on sport performance and the use of imagery during sport performance. (Prerequisites: Completion of all required first and second year Kinesiology courses. Open only to Movement Science Majors.)

95-498. Internship
A supervised, project-driven work experience in an approved setting. The experience will be expected to provide students with an enriched learning opportunity to integrate theory and practice. Internships are open to 4th year Kinesiology students from either major. (Offered on a Pass/Non-Pass basis.) (Prerequisite: consent of the instructor is required at least three weeks prior to the end of the Fall or Winter term preceding the term in which enrollment is anticipated.) (9 hours a week.)

95-499. Co-op Work Experience III
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course cannot continue in the co-op program.)

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LABOUR STUDIES: COURSES

54-100. Labour and Social Movements in Canadian Society
An interdisciplinary introduction to the study of labour and social movements, focussing on their efforts to address the needs of workers, women, gays and lesbians, social and ethnic minorities, students, and the poor.

54-105. Working for a Living
This course uses the students' own experiences of work to examine the economic, social, and psychological significance of paid and unpaid work in Canadian society, the tasks and values assigned to various kinds of work, and the relationship between work and living standards.

54-200. Labour Law and Policy
An interdisciplinary examination of the relationship between the state, law, and labour unions. This course examines the role of the state and labour law in shaping and mediating the relationship between labour and employers. The impact of laws in labour relations, employment standards, workers' compensation, human rights, and occupational health and safety are examined.

54-204. Worker Health and Safety
An interdisciplinary examination of the political, legal, social, and economic aspects of occupational health and safety. This course covers the history of health and safety within industrial, office, and rural contexts in Canada and other parts of the world.

54-206. Work and Equality
The course explores how work (both paid and unpaid) is distributed, valued and rewarded with special attention to issues of gender, racialization, ethnicity, sexuality, age and physical appearance. The course will also cover efforts to create greater equality in the valuation of work and the distribution of responsibility through public policy, law, collective bargaining, and advocacy. (Prerequisites: 54-105 or 53-100, or 48-101 and 48-102) (Also offered as Women’s Studies 53-206)

54-218. Everyday Disputes and Their Resolution
Students design and practice techniques for resolving everyday conflicts with friends and co-workers effectively and respectfully, and without damaging interpersonal relationships. Students learn to focus on the problem, not the person; identify and respond to hidden agendas and subvert personal attacks. Pre-requisite: Semester 3 or above standing or permission of the instructor.

54-225. Work and Organizations
An examination of the changing world of work from a variety of theoretical perspectives. The course examines workplace organization, including management strategies and workers' responses. Special topics include: work in the automobile, clothing, or other specific industries, contemporary changes in work organization and organizational issues involving class, ethnicity, and gender. (Also offered as Sociology 48-225.) (Prerequisites: any two of 48-101, 48-102, 54-100; or Labour Studies students must have at least Semester 2 standing.)

54-237. Labour and Social Justice
An examination of the philosophical problems raised by the nature and function of labour in a changing society. Topics to be addressed include: the relationship between labour and the struggle for democracy, labour as a social movement, the relationship between labour and conceptions of the good life, the relationship between economic and human value, technology and the nature of labour, and the sexual division of labour. (Also offered as 34-237.) (Prerequisite: 2nd semester standing.)

54-260. Women and Globalization
This course introduces students to gender-sensitive analysis of the role of women in the global economy. Course materials cover the place of women in the international division of labour, the role of women in export-oriented industries in the "Third World," and women as "homeworkers" in the First and Third World. Students will utilize relevant empirical material to develop critical thinking and an understanding of gender inequalities in the "development process." (Prerequisites: at least Semester 3 standing.)(Also offered as Women's Studies 53-260.)

54-270. Speaking Truth to Power: Voice and Activism

An examination of contemporary struggles for social change with a particular focus on anti-consumerist and environmental justice campaigns. Students learn to create persuasive social justice messages. (Prerequisite: Semester 3 or above standing.) (Also offered as Dramatic Art 24-270 and Communication, Media and Film 40-270)

54-301. Labour Movements and Social Change
An examination of various theories of labour movements from an interdisciplinary perspective. The focus is on explaining how and why workers have organized labour unions and on understanding their relative successes and failures in achieving changes in work and in society more generally. The role of workers in revolutionary movements and their contributions to other social movements may also be examined. (Prerequisite: 54-100 and 54-105.)

54-310. Special Topics
Topics may vary from term to term; consult with a Labour Studies advisor for details.(May be repeated for credit if the topics are different.)

54-322. Labour, Workplace and Communication
The course involves a critical exploration of the relationships between labour and information technology from a communication perspective. Both political economy and cultural studies approaches are used to analyze the everyday experiences of individuals in both their paid and unpaid labour. Issues examined may include Scientific Management and Fordism/Post-Fordism, globalization, electronic surveillance, the natural environment, and the intersection(s) of race/ethnicity, class, and gender. (Also offered as Communication Studies 40-322). (Prerequisites: 40-202 or 40-257 or Labour studies majors must have at least semester 4 standing.) (Credit cannot be obtained for both 40-321 and 54-322.)

54-326. Jobs, Careers, and the Labour Market
An examination of occupations and the changing labour market. This course examines the ways people choose occupations and develop careers, the nature of professions and professionalization, unemployment and its consequences, and the influence of occupations on individuals and society in a wider sense. Special topics include the impact of technological change on the occupational structure of younger and other populations. (Prerequisites: 48-110/101, or 54-100; or Labour Studies students must have at least Semester 4 standing.) (Also offered as Sociology 48-326.)

54-327. Social Movements
An examination of theories and case studies of world revolutions, class struggles, and various social movements, such as the feminist, gay and lesbian, labour, native, ecological, and other movements. (Also offered as 48-327 and 48-327.) (Prerequisites: 48-110/101 or 54-100; or Labour Studies students must have at least Semester 5 standing.)

54-332. Labour and the Industrialization Process
The development of Canadian industry and workers' responses to industrialization are examined. Special topics may include early industrialization and its effects, the development of monopoly capitalism, the emergence of service and other new industries, the impact of new technologies, changes in the division of labour, the impact of globalization and economic restructuring, the development of new management approaches such as lean production, changes in women's work, the development of labour unions, and the role of women, youth, and minorities at work. (Prerequisites: 48-110/101 or 54-100; or Labour Studies students must have at least Semester 5 standing.) (Also offered as 48-332.) (Credit may not be obtained for both 48-332 and 54-332.)

54-349. Canadian Labour History
A study of the development of the Canadian labour movement and an analysis of the Canadian working-class experience during the nineteenth and twentieth centuries. (Also offered as History 43-349.) (Prerequisites: semester 4 standing. Labour Studies majors must have Semester 4 or above standing or consent of instructor.)

54-350. Practicum in Work and Employment
Students consolidate and enhance their knowledge of workplace rights and responsibilities by developing and delivering job-readiness workshops to high school students in the Windsor area. This practicum experience equips students to help young workers anticipate and respond effectively to their workplace problems. (Prerequisites: one of 02-54-200, 54-204, 53/54-206, or 54-318; and permission of the instructor.)

54-370. Industrial-Organizational Psychology
The study of employees, workplaces, and organizations. Topics include job analysis and competency models, recruitment, selection, and decision making, performance management, training, group and team processes in organizations, employee attitudes, affect, and behaviour, motivation, leadership, productive and counterproductive work behaviour. (Prerequisites: 46-115 and 46-116; or Labour Studies students with at least Semester 4 standing; or consent of instructor.) (Also offered as 46-370.)

54-401. Practicum in Social Justice and Labour Studies
This course offers students the opportunity to apply their academic knowledge in a practical setting. Students will be placed with organizations dedicated to the pursuit of social justice and/or labour issues in the Windsor area. Students will be assigned a major project to be completed under the supervision of the course instructor and an on-site practicum supervisor. Students will be expected to contribute a minimum of three hours per week, meeting regularly with course instructor to provide oral and written reports. This course is open to Social Justice and Labour Studies majors only. Also offered as Social Justice 38-447. Prerequisites: 38-321 or 54-301 and semester 5 standing.

54-428. Advanced Seminar in Labour and Globalization
An examination of the impact of contemporary globalization on work life and working class economic and political mobilization. Particular emphasis is placed on a comparative study of labour movement strategies with a view to understanding the nationally specific and cross national character of these responses. (Also offered as 48-428.) (Prerequisites: 48-326 or 54-301.)

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FACULTY OF LAW: SERVICE COURSES

The Law Faculty offers a number of courses which are available for credit toward university degrees and diplomas other than the full-time JD degree. These courses cannot presently be counted as credit for the JD degree because of Law Society Regulations governing qualification for call to the Ontario Bar.

98-971. to 98-979. Special Topics Law
Theses courses provide an opportunity to examine in-depth legal issues not covered in the regular curriculum. The content will vary to reflect student need and faculty expertise.

99-218. Environmental Law
This course is intended to provide non-law students with a background in environmental law with an emphasis on Ontario environmental legislation. Topics include: introduction to common law, public participation, jurisdictional issues, environmental assessment, Ontario regulations covering air, water and waste management, enforcement, compliance and alternatives to regulations.

99-219. Forensic Evidence and the Canadian Legal System
This course is designed as an introduction to the Common Law legal system in Canada and the place of forensic evidence in law. The following topics will be covered: the nature of law and the constitutional basis of legal authority in Canada; the court structure; the nature of the adversarial system and the criminal and civil process; burdens of proof and onus; a primer on the rules of evidence with special emphasis on the opinion of rule and the use of real and demonstrative evidence.

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MATHEMATICS AND STATISTICS: COURSES

Students are reminded that, as indicated in the course descriptions, certain Mathematics and Statistics courses may not be available for credit in some or all of the degree programs.
All courses listed will not necessarily be offered each year.

MATHEMATICS

62-101. Access to Calculus
A variety of pre-calculus topics including coordinate geometry, trigonometric, exponential and logarithmic functions, and algebraic procedures. Introduction to differential calculus. (This course and 62-102 satisfy the prerequisite or admission requirement of Grade 12 “U” Advanced Functions and Grade 12 “U” Calculus and Vectors (or equivalent), respectively. May not be taken for credit by (a) majors in the Faculty of Science or the Faculty of Engineering;(b) students who successfully completed 62-130, 62-139, 62-140; (c) students who achieved a grade of 70% or greater in MHF4U Advanced Functions or equivalent.) (3 lecture hours, 1 tutorial hour per week.)

62-102. Access to Algebra
This course enables students to broaden their mathematical knowledge and skills related to the mathematical topics of vectors, intersections of lines and planes in three dimensional space counting techniques, and mathematical induction. Students will develop an understanding of proofs, using deductive, algebraic, vector and indirect methods. Students will use vector concepts to solve physical problems. (This course and 62-101 satisfy the prerequisite or admission requirement of Grade 12 **“U”** Calculus and Vectors (or equivalent) and Grade 12 “U” Advanced Functions, respectively. May not be taken for credit in any program within the Faculty of Science or the Faculty of Engineering.) (3 lecture hours, 1 tutorial hour per week.)

62-120. Linear Algebra I
Linear systems, matrix algebra, determinants, vectors in Rn , dot product, orthogonalization, eigenvalues, and diagonalization. (Prerequisite: 62-102 or Grade 12 Advanced Functions and Grade 12 Calculus and Vectors or equivalent.) (Antirequisite: 62-125 or 62-126) (3 lecture hours, 1 tutorial hour a week.)

62-125 Vectors and Linear Algebra
Vectors, three dimensional geometry, linear systems, matrix algebra, determinants, vector spaces, dot products, cross products, eigenvalues and eigenvectors, and diagonalization, orthogonalization. (This is required for students who do not have credit for Ontario grade 12 Calculus and Vectors. The course is equivalent to 62-120/126 for all prerequisite purposes.) (Prerequisite: Grade 12 Advanced Functions or equivalent.) (Antirequisites: 62-120, 62-126.) (4 lecture hours, 1 tutorial hour a week.)

62-126. Linear Algebra (Engineering)
Linear systems, matrix algebra, determinants, vectors in Rn, dot product, orthogonalization, and eigenvalues. (Prerequisite: 62-102 or Grade 12 Advanced Functions and Grade 12 Calculus and Vectors, or equivalent.) (Antirequisite: 62-120, or 62-125.) (3 lectures hours, 1 tutorial hour a week.)

62-130. Elements of Calculus
Review of functions. Limits and continuity. Derivatives and applications. Indefinite integrals and methods of integration. Partial derivatives. A variety of applications. Prerequisite: Grade 12 Advanced Functions or 62-101.) (May not be taken for credit concurrently with, or subsequent to having obtained credit in 62-139 or 62-140. This course is not a sufficient prerequisite to 62-141, but may serve as preparation for 62-140.) (3 lecture hours, 1 tutorial hour a week.)

62-139. Functions and Differential Calculus
Trigonometric functions and identities, inverse trigonometric functions, limits and continuity, derivatives and applications, Mean value theorem, indeterminate forms and l’Hospital’s rule, antiderivatives, introduction to indefinite integrals. (This course is required for students who do not have credit for Ontario grade 12 Calculus and Vectors. The course is equivalent to 62-140 for all prerequisite purposes.) (Prerequisite: Grade 12 Advanced Functions or equivalent.)

(Antirequisite: 62-140.) (4 lecture hours, 1 tutorial hour a week.) [Fall 2010-Winter 2013: 4 lecture hours, 2 tutorial hour a week.]

62-140. Differential Calculus
Trigonometric functions and identities. Inverse trigonometric functions. Limits and continuity. Derivatives and applications. Mean Value Theorem. Indeterminate forms and l'Hopital's Rule. Antiderivatives. Introduction to definite integrals. (Prerequisite: Grade 12 Advanced Functions and Grade 12 Calculus and Vectors or equivalent, or 62-101.) (Antirequisite: 62-139) (3 lecture hours, 1 tutorial hour a week.) [Fall 2010-Winter 2013: 4 lecture hours, 2 tutorial hour a week.]

62-141. Integral Calculus
Antiderivatives. The definite integral and Fundamental Theorem. Techniques of integration. Applications of the definite integral. Improper integrals. Separable differential equations. Polar and parametric coordinates. (Prerequisite: 62-139 or 62-140.) (3 lecture hours, 1 tutorial hour a week.)

62-188. Work Term I
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.)

62-190. Mathematical Foundations
Logic, sets, relations, functions. Development of skills in theoretical mathematics. (Prerequisite: 60-100 or one of 62-120, 62-125, or 62-126.) (2 lecture, 2 tutorial hours a week.)

62-194. Mathematics for Business
An introduction to concepts and techniques of mathematics useful in business situations. Topics include mathematical modeling of qualitative scenarios, linear simultaneous equations, inequalities, exponential and logarithmic functions, graphical linear programming, and probability. (Prerequisite: Any grade 12 “U” math course, or 62-101.) (This course is intended for students in Business Administration only. May not be taken for credit in any program within the Faculty of Science.) (3 lecture hours, 1 tutorial hour per week.)

62-215. Vector Calculus
Quadric surfaces. Vector differential calculus. Multiple integration. Line and surface integrals. (Prerequisites: 62-141, and one of 62-120, 62-126 or 62-125.) (3 lecture hours, 1 tutorial hour a week.)

62-216. Differential Equations
Differential equations and Laplace transforms. Series solutions of differential equations. Applications to science and engineering. (Prerequisites: 62-141, and one of 62-120 or 62-126.) (3 lecture hours, 1 tutorial hour a week.)

62-220. Linear Algebra II
Rigorous study of the following topics: linear systems, vector spaces, linear transformations, projections, pseudo-inverses, determinants, inner product spaces and applications. (Prerequisites: 62-190 and one of 62-120, 62-125 or 62-126.) (3 lecture hours, 1 tutorial hour a week.)

62-221. Linear Algebra III
A rigourous treatment of eigenvalues and eigenvectors, diagonalization, similarity problem and canonical form for real and complex matrices; positive definite matrices; computational methods for approximating solutions to systems of linear equations and eigenvalues. (Prerequisite: 62-220.) (3 lecture hours, 1 tutorial hour a week.)

62-288. Work Term II
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.)

62-314. Introduction to Analysis I
Real numbers. Limits, sequences, and continuity. Differentiation. (Prerequisites: 62-141, 62-190 and one of 62-120, 62-125 or 62-126.) (3 lecture hours, 1 tutorial hour a week.)

62-315. Introduction to Analysis II
Sequences and series of functions. Uniform and absolute convergence. Power Series. Integration. (Prerequisite: 62-314.) (3 lecture hours, 1 tutorial hour a week.)

62-318. Complex Variables
Complex numbers. Analytic functions. Contour integration. Series, Laurent expansions, residues. Application to real integrals. (Prerequisite: 62-215; corequisite: 62-216.) (3 lecture hours, 1 tutorial hour per week.)

62-321. Abstract Algebra
Introduction to groups, rings, and fields. (Prerequisite: 62-220 or 62-322.) (3 lecture hours a week.)

62-322. Number Theory
Divisibility, congruences, number-theoretic functions. Theorems of Euler, Fermat, and Wilson. Theory of primes and quadratic residues. (Prerequisites: one of 62-120, 62-125 or 62-126 and 62-190.) (3 lecture hours a week.)

62-342. Combinatorics
Finite combinatorics; counting problems involving set operations, relations and functions; principle of inclusion and exclusion; ordinary and exponential generating functions; recurrence relations. (Prerequisites: 62-141 and 62-190.) (3 lecture hours a week.)

62-343 Introduction to graph theory
This is an introductory course in graph theory. Topics include: paths and cycles, bipartite graphs, graph isomorphism, connectivity, Eulerian graphs, Hamiltonian graphs, trees, properties of trees, planarity, Euler's formula, dual graphs, coloring graphs, Brooks' theorem, coloring maps, chromatic polynomials, digraphs, matchings, Menger's theorem, Hall's theorem, Tutte's theorem. (Prerequisites: 62-220 or 60-231).

62-360. Special Functions
Uniform convergence, Fourier Series, Orthonormal bases, Sturm-Liouville eigenvalue problems, eigenfunction expansions, Gamma function, Bessel functions, Legendre polynomials and functions, and the hypergeometric functions. (Prerequisite: 62-215 and 62-216.) (3 lecture hours a week.)

62-369. Numerical Analysis for Computer Scientists
Introductory course in the application of numerical methods using computer oriented algorithms such as finding roots, solving systems of equations, differentiation, integration and optimization. (Restricted to students in Computer Science.) (Prerequisites: 60-141, 62-141 and one of 62-120, 62-125 or 62-126.)

62-374. Linear Programming
Topics covered are: geometric linear programming, the Simplex method, the revised Simplex method, duality theory, sensitivity analysis, project planning and integer programming. Optional topics include: the transportation problem, the upper bounding technique, the dual Simplex method, parametric linear programming, game theory, and goal planning. Completion of some assignments will require the use of computer software packages. This course is intended to help students prepare for some parts of the Society of Actuaries examination on Operations Research (Course 130). Interested students should also take 65-376. (Prerequisite: 62-220 or consent of instructor.) (Antirequisite: 91-312.) (3 lecture hours a week.)

62-380. Numerical Methods
Topics covered are: nonlinear equations in one variable, interpolation, numerical integration (quadrature), and linear systems (direct methods). Optional topics are: numerical differentiation, iterative methods for boundary value problems. Completion of some assignments will require the use of computer software packages. This course is intended to help students prepare for some parts of the Society of Actuaries examination on Numerical Methods (Course 135). (Prerequisites: 62-215, 62-216, and one of 62-120, 62-125 or 62-126.) (3 lecture hours a week.)

62-388. Work Term III

Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.)

62-392. Theory of Interest
Measurement of interest, elementary and general annuities, amortization schedules and sinking funds, bonds, depreciation, depletion, and capitalized cost. This course helps prepare students for the Society of Actuaries examinations. (Prerequisite: 62-141 or consent of instructor.) (3 lecture hours a week.)

62-410. Real Analysis I
Lebesgue measure and Lebesgue integral. Differentiation and integration. Radon-Nikodym theorem. (Prerequisite: 62-315.) (3 lecture hours a week.)

62-411. Real Analysis II
Metric spaces. Topological spaces. Stone-Weierstrass and Ascoli theorems. Classical Banach spaces. (Prerequisite: 62-410.) (3 lecture hours a week.)

62-413. Functional Analysis
Normed spaces, bounded linear operators, and the Banach dual spaces. The Hahn-Banach Theorem, the Uniform Boundedness Principle, and the Open Mapping Theorem. Weak and weak* topologies. Hilbert spaces and operators on Hilbert space. (Prerequisite: 62-410.) (3 lecture hours per week.)

62-420. Introduction to Group Theory
Abstract groups, subgroups, isomorphism theorems, orbits, class equation, quotient groups, Sylow's theorems, metric vector spaces, quadratic forms, basic concepts of orthogonal geometry, the classical groups. (Prerequisites: 62-221 and 62-321.) (3 lecture hours a week.)

62-422. Introduction to Field Theory
Polynomial rings, splitting fields, The Fundamental Theorem of Galois Theory, Galois' criterion for solvability by radicals, algebraically closed fields, finite fields. (Prerequisites: 62-221 and 62-321.) (3 lecture hours a week.)

62-482. Mathematical Programming
Topics include: unconstrained optimization, convexity, least squares problems, optimality conditions, penalty methods. Completion of some assignments will require the use of computer software packages. (Prerequisites: 62-215, 62-314, 62-221, and one of 62-374 or 65-376.) (3 lecture hours a week.)

62-488. Work Term IV
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.)

62-490. Actuarial Mathematics I
Life contingencies. Survival distributions and life tables, life insurance, life annuities, net premiums, net premium reserves. This course helps prepare students for the Society of Actuaries examinations. (Prerequisites: 62-215, 62-216, 62-392, and 65-251, or consent of instructor.) (3 lecture hours a week.)

62-492. Actuarial Mathematics II
Selection of topics from: advanced life contingencies, risk theory, survival models, construction and graduation of mortality tables. This course helps prepare students for the Society of Actuaries examinations. (Prerequisite: 62-490 or consent of instructor.) (3 lecture hours a week.)

62-498. Topics in Mathematics
Advanced topics not covered in other courses. (May be repeated for credit when the topic is different.) (Prerequisite: consent of the instructor.) (3 lecture hours a week.)

STATISTICS

Undergraduate Statistics courses taught outside Mathematics and Statistics may not be taken for credit in any mathematics program.

65-205. Statistics for the Sciences
Descriptive statistics. Probability, discrete and continuous distributions. Point and interval estimation. Hypothesis testing. Goodness-of-fit. Contingency tables. (Prerequisite: Grade 12“U” Advanced Level Mathematics or equivalent, or Grade 11 Functions and Relations, or Grade 11 Functions.) (Antirequisites: 02-250, 73-101, 73-102, 73-105, 73-205, and 85-222.) (May not be taken for credit after taking 65-250 or 65-251.) (3 lecture hours, 1 tutorial hour a week.)

65-250. Introduction to Probability
Descriptive measures, combinatorics, probability, random variables, special discrete and continuous distributions, sampling distribution, point and interval estimation. (Prerequisite: 62-141.) (3 lecture hours, 1 tutorial hour a week.)

65-251. Introduction to Statistics
Distributions, point and interval estimation, hypothesis testing, contingency tables, analysis of variance, bivariate distributions, regression and correlation, non-parametric methods. (Prerequisite: 65-250.) (3 lecture hours, 1 tutorial hour a week.)

65-340. Applied Probability
Conditional probabilities and expectations. Markov chains. Poisson processes, renewal theory, reliability, queueing theory. (Prerequisites: 65-251, 62-215 and 62-216.) (3 lecture hours a week.)

65-350. Probability
Axioms of theory of probability. Discrete and continuous distributions including binomial, Poisson, exponential, normal chi-square, gamma, t, and F distributions. Multivariate distributions, conditional distributions, independence, expectation, moment generating functions, characteristic functions, transformation of random variables, order statistics, law of large numbers, central limit theorem. (Prerequisite: 65-251.) (3 lecture hours a week.)

65-351. Statistics
Point and interval estimations, properties of estimators, methods of estimation, least squares estimation and linear models, Bayesian estimation, Rao-Blackwell theorem, tests of hypotheses, Neyman-Pearson Lemma, analysis of variance. (Prerequisite: 65-350.) (3 lecture hours a week.)

65-376. Stochastic Operations Research
Topics covered are: deterministic and stochastic dynamic programming, queuing theory, decision analysis, and simulation. Optional topics include: inventory theory, forecasting, and Markov processes. Completion of some assignments will require the use of computer software packages. This course is intended to help students prepare for some parts of the Society of Actuaries examination on Operations Research (Course 130). Interested students should also take 62-374. (Prerequisite: 65-205 or 65-250.) (Antirequisite: 91-412.) (3 lecture hours a week.)

65-452. Experimental Designs
ANOVA models without and with interactions; randomized block, Latin square, factorial, confounded factorial, balanced incomplete block, and other designs; response surface methodology. (Prerequisite: 65-251 or 65-350.) (3 lecture hours a week.)

65-454. Sampling Theory
Basic concepts. Simple random and stratified sampling. Ratio and regression methods. Systematic and cluster sampling. Multi-stage sampling, PPS sampling. Errors in surveys. Sampling methods in social investigation. (Prerequisite: 65-251 or 65-350.) (3 lecture hours a week.)

65-455. Topics in Statistics
Advanced topics in probability or statistics not covered in other courses. (Prerequisite: consent of the instructor.) (3 lecture hours a week.) (May be repeated for credit when the topic is different.)

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SCHOOL OF CREATIVE ARTS

MUSIC COURSES

MUSIC ACADEMIC STUDIES

Not all courses listed will necessarily be offered each term.

All courses are three hours a week (for 3.0 credit hours) unless otherwise indicated.

All Music courses except those whose middle digit is 0 may require consent of the instructor for enrollment.

32-107. Explorations in Music
Aspects of music with broad general appeal. Topics may include: music for the cinema; composer, performer and community; recent trends in the music industry. (No prerequisites; open to any student in the university.) (May not count toward any Music degree.)

32-102. Fundamentals of Music and Sound
An investigation of the principles, vocabulary and concepts of musical and sonic art forms, including the physical nature of sound, technologies for sound recording and processing, music notation, and basic elements of musical and sonic design.

32-112. Music Theory I
Examination of basic harmonic, contrapuntal, and formal elements in tonal music. (Admission by examination or consent of the instructor.) (Should be taken concurrently with 32-222.) (3 hours a week , plus 2 keyboard laboratory hours a week.)

32-113. Music Theory II
Continuation of 32-112, which is prerequisite. (Should be taken concurrently with 32-223.) (3 hours a week, plus 2 keyboard laboratory hours a week.)

32-116. Themes in Popular Music
This course explores the cultural, social, and political implications of continuously emerging popular musical styles, primarily in Western cultures. Includes analysis of popular musical styles within various theoretical discussions around technology, mass media, political economy, performance, and listening practices, corporate control, locality, and globalization.

32-120. Introduction to Music Therapy
A survey of the origins of music therapy from the historic uses of music in healing to present-day theories of practice in various clinical settings. Music therapy techniques demonstrated.

32-121. Skills for Music Therapy
Leadership skills, group management techniques, basic guitar skills for music therapy sessions, and materials for music activities with various ages and populations. Music therapy site observations. (Prerequisite: 32-120 and 33-111 or consent of the instructor.)

32-126. Music History and Literature I
Musical styles from the Middle Ages to about 1750. (Prerequisite: admission to the B. Mus., B.Mus.Th., or B.A. (Music) programs or consent of the instructor.)

32-127. Music History and Literature II
Musical styles from about 1750 to the present day. (Prerequisite: 32-126 or consent of the instructor.)
(Antirequisites: 32-117. Students may not receive credit for both 32-117 and 32-126 or 32-127.)

32-212. Music Theory III
Examination of more complex harmonic, contrapuntal, and formal elements in tonal music. (Prerequisite: 32-113.) (Should be taken concurrently with 32-322.)

32-213. Music Theory IV

Continuation of 32-212, which is prerequisite. (Should be taken concurrently with 32-323.)

32-222. Basic Skills I
Intensive drills in ear training, sight singing, dictation, and basic keyboard. (Admission by examination or consent of the instructor.) (Should be taken concurrently with 32-112.) (1.50 credit hour course.)

32-223. Basic Skills II
Continuation of 32-222, which is prerequisite. (Should be taken concurrently with 32-113.) (1.50 credit hour course.)

32-227. Studies in Baroque Music
Special studies in the history and literature of Baroque music, to be arranged by the instructor. (Prerequisites: 32-126, 32-127.)

32-232. Music Technology
Study of the application of digital technologies to the creation of electroacoustic music, audio art, and sound installation. This course will explore the physical nature of sound as well as the history and nature of sound synthesis, MIDI, algorithmic composition, and digital recording. (Prerequisites: 32-113 or 27-105 or 40-214; an ability to read notated music is recommended.) (Also offered as 27-263 Sonic Art.) (Lab fees may apply.)

32-236. Performance Literature I
Survey of the literature written for the student's major instrument.

32-239. Woodwind Techniques
Fundamental techniques of woodwind instruments and their application in teaching beginners. Rental instruments are available. (Prerequisite: 32-113)

32-242. Diverse Musics and Practices I
This course combines music-making in an ensemble context with an introduction to techniques of music composition, arranging, and sound recording. Students will draw on their previous musical experience to complete a range of creative projects that reflect the diverse nature of contemporary musical practice. (Admission by audition or portfolio.) (May be repeated for credit.), except by students in the B.Mus. degree program.) (2 hours per week, plus 6 hours of rehearsal.)

32-243. Diverse Musics and Practices II
Continuation of 32-242. (Pre-requisites: 32-242) (May be repeated for credit except by students in the B.Mus. degree program.)) (2 hrs. per week, plus 6 hrs. of rehearsal.)

32-246. History of Jazz
Exploration of music identified as jazz, the role of jazz in North American culture, and the debates that surround jazz in the twentieth and twenty-first centuries. (Prerequisite: 32-126 and 32-127.)

32-247. Analysis of Jazz Styles
A stylistic study of major jazz innovators through the analysis of solo transcriptions and recordings. (Prerequisite: consent of the instructor.)

32-248. Basic Conducting I
Instruction in baton technique and the conducting of choral and instrumental ensembles.

32-249. Basic Conducting II
Instruction in score preparation and rehearsal techniques for vocal and instrumental ensembles. (Prerequisite: 32-248.)

32-255. Vocal Techniques
Introduction to working with children's and adolescent voices. Topics include physiology of the voice, tonal placement, care of the teenage voice, the boy's changing voice, solo and group singing. (Prerequisite: 33-213, or 33-317, or 33-347.) (2 lecture hours a week and one laboratory hour a week.) (1.50 credit hour course.)

32-269. Percussion Techniques
Fundamental techniques of percussion instruments and their application in teaching beginners.(Prerequisite: 32-113)

32-279. Brass Techniques
Fundamental techniques of brass instruments and their application in teaching

beginners. Rental instruments are available. (Prerequisite: 32-113)

32-285. Foundations of Music Education
An introduction to the philosophical, sociological, and historical foundations of teaching music. The nature and value of music education will be examined through discourse and reflective thought, with an emphasis on developing critical thinking skills and building a framework for a personal philosophy of music education. (Prerequisite: enrolment in the B.Mus., B.A. (Music) degrees, or permission of the instructor.) Note: Students may receive credit for only one of 32-185, 32-285, and 32-385.

32-317. Film Music
Exploration of the ways in which film music mediates perceptions of the visual. Includes focus on development of critical listening and interpretive skills using a number of (mostly) Hollywood films as principal texts while introducing a number of political, aesthetic and historical issues. (Prerequisites: 32-126 and 32-127).

32-322. Advanced Skills I
Intensive drills in ear training, sight singing, keyboard harmony, dictation, and improvisation. (Prerequisites: 32-223 and 32-113 and successful completion of the Keyboard Proficiency Requirement.) (Should be taken concurrently with 32-212.) (1.50 credit hour course.)

32-323. Advanced Skills II
Continuation of 32-322, which is prerequisite. (Should be taken concurrently with 32-213.) (1.50 credit hour course.)

32-326. Studies in Classical Music
Special studies in the history and literature of Classical music, to be arranged by the instructor. (Prerequisites: 32-126 and 32-127.)

32-327. Studies in Romantic Music
Special studies in the history and literature of Romantic music, to be arranged by the instructor. (Prerequisites: 32-126 and 32-127.)

32-330. Theories of Music Therapy
Study of psychotherapy theories and their relationship to various models of music therapy interventions. Investigation of current research and clinical practice methods. (Prerequisite: 32-120 or consent of the instructor.)

32-331. Creative Improvisation in Music Therapy
An examination of improvisational methods of music therapy. Through an experiential process, students explore the therapeutic benefit of music as it relates to sound patterns, movement, drama, and art. Piano improvisation techniques included. (Prerequisites: 32-121 and 32-322.)

32-332. Advanced Music Technology
An in-depth study of techniques for creating advanced sound-based art, including sound synthesis, electroacoustic music composition, sound installation, and soundtracks for film and video. (Pre-requisite: 27-263 or 32-232 or permission of the instructor.) (Also offered as 27-363 Advanced Sonic Art.) (May be repeated for credit.) (Lab fees may apply.)

32-340. Field Practice I
Supervised observation and practice in selected clinical settings. Assessment, intervention, and evaluation according to appropriate music therapy goals within the given population. (Prerequisites: 32-121, and 32-331.) (Normally 1 lecture hour and 6-8 practical hours a week.) (1.50 credit hour course.) (Open to Music Therapy students only.)

32-341. Field Practice II
Continuation of 32-340, which is prerequisite. (1.50 credit hour course.)

32-342. Voice-leading and Arranging I
Study of voice-leading techniques with special attention to part-writing. Includes application of various approaches to writing tonal chord progressions, creating contrapuntal musical textures, and balancing melodic and harmonic considerations to the arrangement of music for a wide variety of homogenous vocal and instrumental ensembles. (Prerequisite: 32-213.)

32-343. Voice-leading and Arranging II
Continuation of Voice-leading and Arranging I. Advanced study of voice-leading techniques with special attention to part-writing. Includes application of various approaches to writing chromatic and post-tonal chord progressions, creating a

range of musical textures, and balancing melodic and harmonic considerations to the arrangement of music for mixed ensembles, electronic orchestras, concert band, and symphony orchestra. (Prerequisite: 32-342.)

32-346. Introduction to Ethnomusicology
Exploration of music cultures of the world within an ethnomusicological framework, including critical analysis of the discourse surrounding “world music” and conventional understanding of “local” and global”. (Prerequisite: 32-126 and 32-127 or consent of the instructor.)

32-412. Music Theory Seminar I
Two- and three-part species counterpoint.

32-420. Psychology of Music
A study of the principles underlying the practice of music therapy and musical behaviour. The study of psychological aspects of musical behaviour: psycho-acoustics, music perception, affective and physiological responses to music, music learning, and measurement. (Open to non-Music majors.) (Prerequisite: 32-120 or consent of the instructor.) (Also offered as Psychology 46-420.)

32-426. Studies in Twentieth-Century Music
Special studies in the history and literature of twentieth-century music, to be arranged by the instructor. (Prerequisites: 32-126 and 32-127.)

32-427. Studies in Canadian Music
Special studies in the history and literature of Canadian music, to be arranged by the instructor. (Prerequisites: 32-126 and 32- 127.)

32-432. New Music Workshop
This course focuses on the composition, analysis, performance, and studio recording of new music. Students work individually and in groups on a series of projects, thus building a portfolio of work over the course of the semester. Projects may include the composition of new pieces, the performance of new repertoire (including student work), analytical papers that explore an aspect of new music or an individual piece, new media projects with a sound component, and interdisciplinary projects undertaken in collaboration with students from other departments. (May be repeated for credit.) (Prerequisites: 32-213 or consent of the instructor.)

32-436. Directed Studies in Music I
Advanced study in a selected area of music. (May be repeated for credit.) (Prerequisite: permission of a program advisor in Music.)

32-437. Directed Studies in Music II
Continuation of 32-436, which is prerequisite. (May be repeated for credit.)

32-440. Field Practice III
Supervised practice in selected clinical settings for the purpose of further concentration within a given setting. The design, implementation, and evaluation of music therapy treatment programs. (Prerequisite: 32-341.) (1 lecture hour and 6 to 8 practical hours a week.) (1.50 credit hour course.)

32-441. Field Practice IV
Continuation of 32-440, which is prerequisite. (1.50 credit hour course.)

32-447. Special Topics in Music
Special study of an area of music chosen by the instructor. May be repeated for credit.

32-458. Conducting Seminar I
Advanced studies in choral or orchestral conducting. The student will serve as assistant conductor of an ensemble, with practical experience in rehearsal technique, score study, literature, and stylistic analysis. (Prerequisite: 32-249 or 32-259, and consent of the instructor.)

32-484. Seminar in Elementary Music Education
Seminar in the critical examination of curriculum materials, teaching methods, and methodological approaches appropriate to elementary grades K-6; observation of music teaching in the school classroom. (Prerequisites: 32-113, 32-223 and 32-285.)

32-485. Seminar in Secondary Music Education
Seminar in the critical examination of techniques for building and maintaining a successful high school music program, including development of musical skills

and discussion of materials and performance literature appropriate to Grades 6-12; observation of music teaching in the school classroom. (Prerequisites: 32-113, 32-223 32-248 and 32-285.)

32-490. Internship in Music Therapy Professional Practice
1000 hours of music therapy practice in a selected clinical setting, including fifty hours of supervision by a CAMT- or AMTA-accredited supervisor and a minimum of 300 direct client contact hours. Offered on a pass/non-pass basis. (Prerequisite: Completion of all other course requirements for the Bachelor of Music Therapy) (3.0 credits over two terms).

32-491. Graduation Project
Independent research or creative activity in the student's individual area of emphasis. The project may take the form of a major research paper, recital of original compositions, or other appropriate vehicle. (Prerequisite: permission of a programme advisor in Music.)

32-494. Critical Issues in Music Education
A critical examination of recent developments and issues in the philosophy, theory, history, and sociology of music education. Emphasis will be placed on the development of critical thinking skills needed for application in reflective practice. (Pre-requisite: 32-285).

MUSIC PERFORMANCE STUDIES

All students registered in Performance Study courses (except 33-270) may be required to perform a confirming audition during the first week of classes. For courses in Performance Instruction, see "Areas of Study-Performance".

33-111. Guitar Techniques
Basic techniques for use with music groups. Chord charts, rhythm graphs, traditional note forms, and guitar accompaniment for individual and group singing. Students must supply their own instrument. (3.0 credit hour course.) (Open to Music Therapy and Music Education students only)

33-210. University Singers
Performance of literature of various styles from all periods. (Normally 4 hours a week.) (May be repeated for credit.) (1.50 credit hour course.)

33-213. Class Voice
Instruction in singing fundamentals and repertoire for students who are not voice majors. (Admission by audition.) (Prerequisite: consent of the instructor.) (2 lecture hours a week.) (1.50 credit hour course.)

33-220. University Wind Ensemble
Performance of major works of the band and wind ensemble literature by groups of various sizes. Performances at University convocations, high school assemblies, and University concerts. (Normally 4 hours a week.) (May be repeated for credit.) (1.50 credit hour course.)

33-230. University Orchestra
Performance of works from the orchestral repertoire. (Normally 4 hours a week.) (May be repeated for credit.) (1.50 credit hour course.)

33-240. Jazz Ensemble
Performance of works arranged for standard jazz band instrumentation. (Normally 4 hours a week.) (May be repeated for credit.) (1.50 credit hour course.)

33-260. Community Orchestra
Rehearsals one evening a week; normally one concert given each term. (May be repeated for credit.) (1.50 credit hour course.)

33-270. Community Choir
Membership open to everyone without audition. Rehearsals one evening a week, and normally one concert given during the term. (Normally 2.5 hours a week.) (May not count toward the B.Mus..or B.Mus.Th. degree.) (Offered on a pass/non-pass basis.) (May be repeated for credit.) (1.50 credit hour course.) (Offered on a pass/non-pass basis.)

33-310. Chamber Choir
Selected literature suitable for performance by a small choir. (Prerequisite: 2 terms of 33-210, or 33-220, or 33-230, or consent of instructor.) (May be repeated for credit.) (1.50 credit hour course.) (Normally 4 hours week.)

33-393. Third-Year Recital
Public presentation of a recital of one hour in playing time on the student's major instrument. Repertoire performed must show a variety of styles and periods. (Prerequisite: permission of the instructor) (1.50 credit hour course.

33-493. Graduation Recital
Same as 33-393, which is prerequisite. (Prerequisite: permission of the instructor) (1.50 credit hour course.)

33-495. Graduation Recital
Public presentation of a recital of at least forty minutes in playing time on the student's major instrument. Repertoire performed must show a variety of styles and periods. (Prerequisite: permission of the instructor) (1.50 credit hour course.)

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NURSING: COURSES

Note 1: Only 63-241, 63-351, and 63-391 are open to non-nursing students. These courses will not necessarily be offered each year.

Note 2: Theory courses are marked with a “(T)” next to the course title. Clinical courses are marked with a "(C)" next to the course title.

Note 3: For all nursing students, a minimum of 60% is required to complete/pass any nursing theory course. A minimum 60% grade is required to meet any nursing theory course prerequisites. (*i.e.* courses that are coded 63-xxx).

63- 166. Health Assessment I (T)
This introductory course in Health assessment will introduce the learner to history taking and physical examination skills. Through lectures, readings, case studies and practice in the laboratory, students will learn and practice performing a holistic health history and the techniques of inspection, palpation, percussion and auscultation for system examinations. Students will learn to gather data from their subjective and objective and lab work assessments and begin to identify normal findings as well as concerning signs and symptoms, unhealthy lifestyle practices and unexpected findings. The focus of the course will be on assessment of the pediatric, adult and elderly client with a brief overview of neonatal assessment. (Pre-requisite: Nursing Student) (Co-requisite: Registration in all courses required for 1st year fall semester.) (2 lecture hours plus 2 laboratory hours each week.)

63-171. Introduction to Nursing (T)
Professional nursing, its organization, structure, dimensions and responsibilities are explored with an emphasis on the role of the nurse and nursing competencies that facilitate maturation and adaptation of clients. Using critical thinking, students are introduced to the concepts of health, clinical decision-making, problem-solving including the nursing process, communication, caring teaching/learning, and management/ planned change. Students learn to identify the health needs of individuals. (Corequisites: Registration in all courses required for first year fall semester.) (3 lecture hours a week.)

63-172. Clinical Nursing Experience (C)
A clinical course designed to provide students with the opportunity to learn and practice patient care and care planning skills in simulated and clinical settings. To be taken concurrently with 63-171 in related clinical areas. (Corequisites: Registration in all courses required for first year fall semester.) (Offered on a Pass/Non-Pass basis.) (6 hours a week.)

63-173. Introduction to Nursing II (T)
Using critical thinking, students learn the nurse's role in health promotion and illness/injury prevention through the use of problem solving, the nursing process, communication, caring, and teaching/learning processes. Students will examine health promotion and illness/injury prevention strategies relative to healthy lifestyle. (Prerequisites: Completion of all year 1 fall nursing courses.) (Corequisites: Registration in all courses required for winter semester.) (3 lecture hours a week.)

63-174. Clinical Nursing Experience (C)
This course provides students with the opportunity to learn and practice health assessment, intervention and evaluation skills for health promotion and disease prevention. Taken concurrently with 63-173 in the related clinical areas. (Prerequisites: Completion of all year 1 fall nursing courses.) (Corequisites: Registration in all courses required for winter semester.) (Offered on a Pass/Non-Pass basis.) (8 hours a week.)

63-175. Anatomy and Physiology I (T)
This introductory course will expose the beginning nursing student to the foundations of anatomy and physiology within the context of nursing and health. Review of the systems will incorporate not only the anatomy and physiology of the system, but its relevance and importance to the care of the patient. Practical laboratory work will complement lectures and integrate theory with clinical application and health assessment I. (3 lecture hours each week, plus 2 laboratory hours every other week). (Co-requisite: Registration in all courses required for first year fall semester.) (Pre-requisite: Nursing Student) (Cross-listed with 55-175).

63- 176. Health Assessment II (T)
This course is a continuation of Health Assessment I (63-166). The nursing student will continue to take health histories and learn physical examination skills incorporating these into the assessment of new systems. Through lectures, readings, case studies and practice in the laboratory, students will continue to learn and practice performing a holistic health history and the techniques of inspection, palpation, percussion and auscultation for system examinations. Students will incorporate what they learned in Health Assessment I (63-166) and continue to gather data from their subjective and objective and lab work assessments and identify normal findings as well as concerning signs and symptoms, unhealthy lifestyle practices and unexpected findings. The focus of the course will be on assessment of the pediatric, adult and elderly client with a brief overview of neonatal assessment. (Pre-requisite: Nursing Student, 63-166.) (Co-requisite: Registration in all courses required for first year winter semester.) (2 lecture hours plus 2 laboratory hours each week.)

63-177. Anatomy and Physiology II (T)
This course is a continuation of Anatomy and Physiology I (63-175/55-175). The nursing student will continue to learn the foundations of anatomy and physiology within the context of nursing and health sciences. Continued review of the systems not covered in Anatomy and Physiology I will incorporate not only the anatomy and physiology of the system, but its relevance and importance to the care of the patient. Practical laboratory work will complement lectures and integrate theory with clinical application and health assessment II. (3 lecture hours each week, plus 2 laboratory hours every other week). (Co-requisite: Registration in all courses required for first year winter semester. (Pre-requisite 63-175/55-175). (Cross-listed with 55-177).

63-230. Health Assessment (T)
A self-directed course for registered nurses. Through specific readings, videotapes, and laboratory practice, students prepare to demonstrate competence in performing a systematic physical assessment and health history. (Must be completed prior to Year 2.) (3 lecture hours a week equivalent.)

63-231. Current Professional Nursing Roles (T)
An introduction to the theories and role behaviours that will facilitate the transition to baccalaureate nursing practice. Health, communication, caring, and problem-solving will be emphasized. (To be taken concurrently with 63-232.) (3 lecture hours a week.)

63-232. Clinical Nursing Experience (C)
A guided clinical experience related to the optimal health of individuals. Focus will be on the application of theoretical knowledge and development of nursing practice. (To be taken concurrently with 63-231.) (Offered on a Pass/Non-Pass basis.) (8 hours a week.)

63-233. Conceptual Frameworks for Nursing Practice (T)
An examination of selected nursing conceptual models and their application in practice. (3 lecture hours a week.)

63-241. Health Issues and Care of Diverse Populations (T)
The examination of the relationship between marginalization and vulnerability in the health care of diverse populations. (Open to non-nursing students and may be taken as an open option by B.Sc.N. students.) (3 lecture hours a week.)

63-271. Family Health (T)
This course provides an introduction to concepts, theories and models of family as the unit of care within the context of community. Family assessment, roles, coping styles and decision-making patterns are examined. Communication, caring and teaching/learning are emphasized to enable the student to assess families and facilitate health promotion and illness/injury prevention of family members. (Prerequisite: Completion of all year 1 science and nursing courses.) (Corequisites: Registration in all courses required in fall semester of year 2 of the program.) (3 lecture hours a week.)

63-272. Clinical Nursing Experience (C)
This clinical practice course is designed to provide the student with the opportunity to learn and practice professional and technical skills including assessment, goal-oriented planning, interventions and evaluation of clinical outcomes for young adults, adults, and older adults experiencing acute and long term health needs within the context of family and community. (Prerequisite: Completion of all year 1 science and nursing courses.) (Corequisites: 63-271. Registration in all courses

required in fall semester of year 2 of the program.) (Offered on a Pass/Non Pass basis.) (10 hrs/week.)

63-273. Nursing Care of Clients with Episodic and Long-Term Health Needs (T)
This course focuses on health, maturation and adaptation of individuals within the context of family and community. The course focuses on young adults, adults, and older adults with alterations in their health status. The course examines the interaction of growth and development, environment and nursing on the maturation and adaptation of individuals with episodic and long-term health needs with predictable outcomes. Using critical thinking, problem solving, decision-making, the nursing process, teaching/learning, caring, assessment, and intervention skills, students study the care of clients with select physiological, mental health, and psychosocial health needs. (Prerequisites: Completion of all year 1 science and nursing courses.) (Corequisites: Registration in all courses required in fall semester of year 2 of the program.) (3 lecture hours a week.)

63-274. Clinical Nursing Experience (C)
This clinical practice course emphasizes the continued opportunity to learn and practice professional and technical skills within maternal -child and pediatric settings. (Offered on a Pass/Non Pass Basis.) (Prerequisites: Completion of all year 2 fall semester courses.) (Corequisites: Registration in all nursing and science courses in winter semester.) (10 hrs/week.)

63-275. Family Health: Child Bearing and Child Rearing Families (T)
This course focuses on the family as the unit of care within the context of community. The course explores child bearing and child rearing families and their development, including reproduction, pregnancy, labor and delivery, as well as maturational and situational crises. Culture, crisis, risk assessment and intervention strategies to promote family health are incorporated. (Prerequisites: Completion of all year 2 fall semester courses.) (Corequisites: Registration in all nursing and science courses in winter semester.) (3 lecture hours a week.)

63-277. Nursing Care of Children and Youth with Episodic and Long-Term Health Needs (T)
This course focuses on health, maturation and adaptation. The course examines the interaction of growth and development, environment and nursing on the maturation and adaptation of children and youth with episodic and long-term health needs with predictable outcomes. Critical thinking, the nursing process, communication, caring and teaching/learning, along with assessment, intervention and evaluation skills are emphasized. (Prerequisites: Completion of all year 2 fall semester courses.) (Corequisites: Registration in all nursing and science courses in winter semester.) (3 lecture hours a week.)

63-278. Clinical Nursing Experience (C)
This clinical practice course is a period of continuous practice taken in intersession/ summer session or as determined by the Faculty of Nursing. The focus is on assessment, goal-oriented interventions and client outcomes within the context of family and community in medical, surgical, maternal child and pediatric settings. (Offered on a Pass/Non Pass basis.) (Prerequisites: Completion of all year 2 nursing and science courses.) (40 hrs/wk for 4 weeks.)

63-279. Pharmacology in Nursing Practice (T)
A course designed to introduce nursing students to the basic concepts and principles of pharmacology related to body systems. Particular emphasis will be placed on the nurse's responsibilities in drug therapy and the development of clinical reasoning skills necessary for the safe administration of medications. The major classifications of drugs will be examined, along with issues such as the baccalaureate prepared nurse's role on interdisciplinary teams, patient safety and error reduction in drug administration. (Prerequisites: Successful completion of all year one nursing (63-) courses) (Co-requisite: Registration in all courses required in fall semester of year 2 of the program.)

63-290. Individualized Clinical Nursing Experience
This clinical practice course is intended for students who were unable to sequentially complete 63-272, 63-274, or 63-278 due to extenuating circumstances. The course emphasizes the practice of professional and technical skills in a clinical setting that will enable to students to obtain course competencies that are consistent with the course that student could not complete as a result of extenuating circumstances. This course may be taken only with special permission, and will be offered only if required resources are available. (Prerequisite: Completion of all year 2 non-clinical nursing courses; clinical course pre-requisites to be determined by the Faculty of Nursing on an individual basis).

(Offered on a Pass/Non Pass basis) (40 hours/week for 2 weeks if used to replace 63-272, 63-274 or 40 hours/week for 4 weeks if used to replace 63-278.) (Students who completed 63-272, 63-274, or 63-278 are not eligible to take this course.)

63-331. Family Nursing (T)
An introduction to family theories, models, and assessment tools that will assist the student to provide family-centered nursing care. (Prerequisites: 63-231, 63-232 and 63-233.) (3 lecture hours a week.)

63-333. Nurse as Counselor and Educator (T)
Concepts, theories, and research in counselling, teaching, and learning as they relate to the nursing roles of counselor and educator. (Prerequisites: 63-231 and 63-232.) (3 lecture hours a week.)

63-334. Clinical Nursing Experience (C)
Guided clinical experience in which students apply the theoretical bases of family nursing, education, and counselling in the practice of family-centered nursing. (Prerequisites 63-231, 63-232, 63-233; Prerequisites or corequisites: 63-331 and 63-333.) (Offered on a Pass/Non-Pass basis.) (8 hours a week.)

63-351. The Human Meaning of Death (T)
An examination of the human experience of death and dying, the meaning of human life, ethical and cultural aspects, euthanasia, and advanced directives. Lectures, readings, films, and discussions will explore a variety of significant thinkers and concepts concerning death. Through various exercises and shared experiences, students will be encouraged to examine their own feelings and attitudes toward death. (Open to non-nursing students and may be taken as an Arts option by B.Sc.N. students.) (3 lecture hours a week.)

63-371. Family Nursing: Families Experiencing Crises (T)
This course examines the special needs of families of all ages experiencing crises, including mental health crises and cultural crises. Risk assessment, as well as intervention strategies for families requiring acute, restorative and palliative care are stressed. (Prerequisite: 63-278.) (Corequisites: Registration in all year 3 fall semester courses.) (3 lecture hours a week.)

63-372. Clinical Nursing Experience (C)
This clinical practice course emphasizes the practice of professional and technical skills in the care of children, teens, and adults experiencing complex or multi-system health disruption within the context of family and community. (Prerequisite: 63-278.) (Corequisites: Registration in all year 3 fall semester courses.) (Offered on a Pass/Non Pass basis.) (10 hours a week.)

63-373. Nursing Care of Clients with Complex Health Problems I (T)
This course focuses on the exploration of health, maturation and adaptation in adults experiencing complex and/or a multi-system health disruption within the context of family and community. Environment, culture, critical thinking, communication, caring and teaching/learning along with assessment and intervention skills are emphasized. (Prerequisite: 63-278.) (Corequisites: Registration in all year 3 fall semester courses.) (3 lecture hours a week.)

63-374. Clinical Nursing Experience (C)
This clinical practice course emphasizes the practice of professional and technical skills in the care of children, teens, and adults experiencing complex or multi-system health disruption within the context of family and community. (Prerequisites: Completion of all year 3 fall semester courses.) (Corequisites: Registration in all year 3 winter semester nursing courses.) (Offered on a Pass/Non Pass basis.) (10 hours a week.)

63-375. Nursing Care of Clients with Complex Health Problems II (T)
This course continues to focus on the exploration of health, maturation and adaptation of adults experiencing complex and/or multi-system health disruptions within the context of family and community. Environment, culture, critical thinking, communication, caring and teaching/learning along with assessment and intervention skills are emphasized. (Prerequisites: Completion of all year 3 fall semester courses.) (Corequisites: Registration in all year 3 winter semester nursing courses.) (3 lecture hours a week.)

63-376. Advanced Health Assessment
This course is intended to help senior level BScN students strengthen their assessment skills through presentation of cases, experiential learning, helping student to effectively and consistently differentiate their assessments and focus

their plans of care. The student will be expected to integrate prior and current learning in deciding what data to collect and what data is important in developing differential nursing diagnoses. Provides an opportunity to focus on critical thinking, diagnostic-reasoning skills as students transition to the novice RN role. (Prerequisite: 63-278).

63-377. Nursing Research (T)
An introduction to the research process in nursing. The focus of the course is on enabling the student to appraise and utilize research findings as the basis for evidenced-based nursing practice. (Prerequisites: 63-278, and 02-250 or 65-205.) (Corequisites: Registration in all year 3 fall semester nursing courses.) (3 lecture hours a week.)

63-378. Clinical Nursing Experience (C)
This course is period of continuous clinical practice offered at the end of year three or as determined by the Faculty of Nursing. The focus is on assessment, goal oriented interventions and outcomes associated with clients with complex or multi system health disruption within the context of family and community, in medical, surgical, maternal/child, and paediatric settings. (Prerequisites: Completion of all year three courses). Offered on a Pass/Non Pass basis. (Total: 80 hours.)

63-389. Community as Client (T)
An introduction to community theories, models and research, that will assist the student to promote the health of groups, aggregates and communities. Students will explore principles and strategies of assisting communities to build/shape their communities or to change factors, that may will increase healthy lifestyles, access to preventative services, decrease discrepancies in health status and outcomes for different populations including the marginalized, school children, and populations at risk for illness and premature death. The nursing tools of caring, communication, problem solving and teaching/learning are emphasized. (Prerequisites: Completion of all required fall year 3 nursing courses.) (3 lecture hours a week.) (Credit may not be obtained for both 63-471 and 63-389)

63-390: Individualized Clinical Nursing Experience
This clinical practice course is intended for students who were unable to sequentially complete 63-372, 63-374, or 63-378 due to extenuating circumstances. The course emphasizes the practice of professional and technical skills in the care of individuals across the life span who are experiencing complex or multi-system health disruption within the context of family and community. *This course may be taken only with special permission, and will be offered only if required resources are available*. (Prerequisite: Completion of all year 3 non-clinical nursing courses; clinical course pre-requisites to be determined by the Faculty of Nursing on an individual basis; all option courses). (Offered on a Pass/Non Pass basis.) (40 hrs/wk for 2 weeks).

63-391. Basic Human Nutrition (T)
A study of the basic principles of nutrition and their relationship to health promotion, disease prevention, health maintenance, and restorative care. The focus will be on the nutritional requirements of healthy individuals and individuals with health disruptions across the life span. (Prerequisites: 59-191, and one of 55-141, 55-204, 55-205, or 63-177.) (Open to non-nursing students.) (3 lecture hours a week.)

63-399. Selected Topics in Nursing
This selected topics course will offer students an opportunity to study in-depth a topic of interest to individuals preparing for a career in a health profession. The selection of topics will vary from term to term, depending on the expertise of available instructors. May include a lab component depending on the topic. Possible special topics include, Women's Health,Indigenous Health, etc., but for a complete list of approved Nursing Electives, please contact the Faculty of Nursing. (Open to non-Nursing students and may be taken as an open option by BScN students.)(3 lecture hours a week, with possible lab component depending on the topic). (May be repeated for credit if content changes)

63-431. Community Nursing (T)
Theory related to nursing care of communities, with emphasis on health promotion. An examination of the factors influencing the health of communities will be included. (Prerequisites: 63-231, 63-232, and 63-233, 63-331, 63-333, 63-334.) (3 lecture hours a week.)

63-432. Clinical Nursing Experience (C)
Guided clinical experience in which students apply theories of leadership, management, and community organization and assessment in the provision of

care to client groups. (Offered on a Pass/Non-Pass basis.) (Prerequisites 63-231, 63-232, 63-233, and 63-333 Prerequisites or corequisites: 63-431 and 63-433(8 hours a week.)

63-433. Leadership and Management in Nursing (T)
Leadership, management, planned change, and organizational theories are examined as they relate to the role of nurse as leader/manager. (Prerequisites: 63-231, 63-232 and 63-233.)

63-443. Nursing Research (T)
An introduction to the research process in nursing. The focus of the course is on enabling the student to critique and utilize research findings in practice. (Prerequisites: 63-231, 63-232 and 63-233 and one of 02-250 or 65-205.) (3 lecture hours a week.)

63-445. Professional Accountability in Nursing Practice (T)
This course provides the student with an opportunity to explore the ethical, legal, political and professional issues as they relate to professional accountability. (Prerequisites 63-231, 63-232, and 63-333.) (3 hours a week.)

63-447. Directed Study (T)
This course provides the student with an opportunity for an indepth study of a health issue in management, education, or practice. Theory and practice are included. (Prerequisites: 63-231, 63-232, and 63-233, 63-334, 63-431, 63-433.) (3 lecture hours a week.)

63-472. Clinical Nursing Experience (C)
This course is a precepted clinical practice experience, which enables the student to synthesize theory, research, and professional and technical skills in clinical nursing practice. The expected student outcome is a beginning skill level in the competencies identified by the College of Nurses of Ontario. (Prerequisites: Completion of all required 300-level Nursing courses, and all option courses.) (Offered on a Pass/Non Pass basis.) (192 hrs over 6 or 12 weeks).

63-473. Concepts of Leadership in Nursing Practice (T)
This course focuses on the leadership and management roles of the nurse within the context of nurses' scope of practice as defined by current legislation and professional standards and expectations. The course is designed to assist nurses to become effective members of health care organizations both as employees, leaders and future managers. Content will address leadership and management theories, organizational structure, planned change, conflict resolution, organizational communication, problem solving, decision making, strategies for effective delegation, motivation, nursing care delivery approaches, and total quality management. (Prerequisites: Completion of all required 300-level Nursing courses, and all option courses.)

63-476. Clinical Nursing Experience (C)
This course is a precepted clinical practice experience within the context of community as client which enables the student to synthesize theory, research and professional and technical skills in clinical nursing practice. The expected student outcome is a beginning skill level identified by the College of Nurses of Ontario. (Prerequisites: Completion of all required 300-level Nursing courses, and all option courses.) (Offered on a Pass/Non Pass basis.) (16 hrs/week.)

63-477. Directed Study (T)
An in-depth study of an area of interest within the students' clinical nursing experience. Students select a major health problem/issue for analysis and synthesis. (Prerequisites:Completion of all required 300-level Nursing courses.) (3 lecture hours a week.)

63-479. Issues in Global Health
This course will explore selected health issues, trends and epidemiological principles that relate to global health. This will include current research related to social determinants of health; primary health care; health care in low-resource regions and the burden of disease in developed and developing countries. Topics will also include the impact of migration, marginalization, and the effects of globalization and climate change on the health of populations. (Prerequisites: Completion of all required 300-level Nursing courses, and all option courses.) (3 lecture hours a week. Course co-requisites: 63-473 and one of 63-472 or 63-476)

63-481. Transition to Professional Practice
Transition to Professional Practice is a capstone course designed to facilitate transition from the role of nursing student to employment as a professional nurse.

Topics discussed will include the ethical, legal, political, professional and interprofessional issues as they relate to professional accountability and safe, competent and compassionate nursing practice. This course culminates in a student designed project. (Pre-requisites 63-471 or 63-389, 63-473 and 63-479. Co-requisites 63-472 or 63-476). (Credit may only be obtained for the pair of 63-475 and 63-477, or 63-481.)

63-490. Individualized Clinical Nursing Experience
This clinical practice course is intended for students who were unable to complete a required Level 4 clinical course (63-472 or 63-476) due to extenuating circumstances. This course emphasizes the practice of professional and technical skills in a clinical setting that will enable to students to obtain course competencies that are consistent with the course that student could not complete as a result of extenuating circumstances. This course may be taken only with special permission, and will be offered only if required resources are available. (Prerequisite: Completion of all non-clinical nursing courses in the level in which the student is enrolled; clinical course pre-requisites to be determined by the Faculty of Nursing on an individual basis). (Offered on a Pass/Non Pass basis) (192 hours over 6-12 weeks) (Students who have successfully completed all of the usual clinical courses for their current academic year are not eligible to take 63-490.)

Fall 2015 Undergraduate Calendar

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PHILOSOPHY: COURSES

All courses listed are three hours a week unless otherwise indicated. Not all courses are offered each term or each academic year.

Please note the middle digit of course numbers denotes specific topics or areas of study.

34-110. Introduction to Western Philosophy
An introduction to philosophy through the study of major figures and movements in the Western philosophical tradition. The figures and themes selected for any given year will be chosen by the instructor.

34-112. Philosophy and Human Nature
What is human nature? How do we think of ourselves as human beings? The course will examine several of the principal theories of human nature that have been put forward in Western philosophy.

34-129. Contemporary Moral Issues
A critical examination of philosophical arguments about controversial moral issues. Readings will be chosen by the instructor on issues connected with one or several of such areas as: biomedical ethics, euthanasia, suicide, environmental ethics, the treatment of animals, war and violence, pornography, censorship.

34-130. Philosophy and Popular Culture
A philosophical inquiry into one or more of the more important contemporary cultural forms and phenomena. Topics may vary and may include popular music, television, virtual reality, sexual roles and stereotypes, or other topics.

34-160. Reasoning Skills
An explanation of, and practice in, the basic knowledge, skills and attitudes which are essential components of reasoning well. (Antirequisite: 34-161 and 34-162.)

34-162. Logic and Argumentation
Basic deductive logic and argumentation theories and their application to the interpretation, assessment and construction of arguments used in the humanities, social sciences, and sciences as well as in discourse in the public realm. Topics include: deductive, inductive, presumptive reasoning or arguments, elementary sampling, differences between the kinds of support in different fields, elementary rhetoric and dialectic, and common fallacies. (Prerequisite: Open only to students in the BAS program.) (Antirequisite: 34-160, 34-161.)

34-221. Introduction to Ethics
A survey of the main contending theoretical positions on such basic questions of ethics as: Are all moral values and norms subjective or objective, relative or absolute? What makes right actions right? What is the good life for human beings?

34-222. Introduction to Social and Political Philosophy
An examination of some of the main contending theories about the nature of society and the state, or of some of the central controversies in social and political theory. (Prerequisite: 34-110 or 34-112 or semester 3 or above standing; or consent of the instructor.)

34-224. Business Ethics
An introduction to some central ethical notions (*e.g.,* justice, the common good, moral vs. legal obligation); application of these issues and concepts to cases drawn from the experiences of business men and women (concerned with such issues as corporate responsibility, conflict of interest, honesty in advertising, preferential hiring, corporate responsibility for environmental externalities).

34-225. Ethics of Life, Death, and Health Care
The course will focus on the ethical issues arising from human mortality and vulnerability to sickness. Problems to be explored will vary from year to year and may include: the relation between mortality and the value of life, the ethics of life-extension, the legitimacy of suicide, physician assisted or not, the ethics of human reproduction, allocating scarce medical resources in an ageing population, and the ethics of genetic engineering.

34-226. Law, Punishment and Morality

An introduction to the philosophical issues related to understanding the nature of law and legal obligation, the relation between law and morality, and the purpose of punishment. The theoretical points and distinctions will be illustrated by their applications to particular current issues. (Prerequisite: semester 3 or above standing, or consent of the instructor.)

34-227. Environmental Ethics
What ethical obligations do we have to the non-human environment? The course examines various answers to that question. Topics may include: animal rights, the moral status of non-human life, the intrinsic value of ecosystems, the importance of wilderness, deep ecology, eco-feminism, economic development, environmentalism, and politics.

34-228. Technology, Human Values and the Environment
An exploration of the philosophically important ethical concepts of human nature, freedom, progress, the good life, moral responsibility, and the environment as these relate to advances in technology. Topics may include: pollution, mass production, the commodification of nature, new technologies (*e.g.,* biotechnology, nanotechnology).

34-236. Feminist Philosophies
An examination of key philosophical themes in feminism and philosophical debates among feminists. The themes and subjects of debate addressed may include sexism and oppression; feminist identity; the political significance of language, personal appearance, and pornography; feminist ethics; and feminist theories of knowledge. (Prerequisite: 34-110 or 34-112 or semester 3 or above standing, or consent of the instructor.) (Also offered as Women's Studies 53-236)

34-237. Labour and Social Justice
An examination of the philosophical problems raised by the nature and function of labour in a changing society. Topics to be addressed may include: the relationship between labour and the struggle for democracy, labour as a social movement, the relationship between labour and conceptions of the good life, the relationship between economic and human value, technology and the nature of labour, and the sexual division of labour. (Also offered as 54-237.) (Prerequisite: 2nd semester standing.)

34-240. Philosophy of Religion
An examination of the philosophical problems involved with religious belief and language. Can the existence of God be proven? Can the non-existence of God be proven? Can claims to religious knowledge be legitimized? Is there a unique logic of religious language that is cognitively meaningful? Is there any basis for claims about life after death? What is the nature of faith? These are the sorts of questions which are dealt with in this course. (Prerequisite: Semester 3 or above standing.)

34-250. Metaphysics
An examination of fundamental questions about the nature of reality. What kinds of things are real; what distinguishes the real from the ideal, or the real from the illusory? Are there abstract entities (e.g., numbers)? The nature of necessity and possibility, essence and existence. (Prerequisite: 34-110 or 34-112 or semester 3 or above standing, or consent of the instructor.)

34-252. Existentialism
A study of the views of some of the major existentialists. Figures studied may include Kierkegaard, Nietzsche, Sartre, Merleau-Ponty, Camus, and Jaspers. (Prerequisite: Semester 3 or above standing.)

34-254. Theory of Knowledge
An examination of the nature of knowledge, with topics such as: definitions of knowledge, accounts of its structure, the extent and limits of knowledge, the relationship between experience and knowledge, the bases of rational or justified belief formation. (Prerequisite: 34-110 or 34-112 or semester 3 or above standing, or consent of the instructor.)

34-255. Knowledge, Science, and Society
The course explores the relationship between what individuals know and their participation in society, including as members of scientific communities. Topics may include: the ways communities rather than individuals can hold knowledge; how cognitive authority depends on a person's membership in, and social position in, society; the role of testimony in knowledge; how the legal system creates knowledge; the roles of gender, race, class, and culture in knowledge; and the ethical implications of knowledge. (Prerequisite: semester 3 or above standing.)

34-260. Informal Logic: Fallacy
The objective is to develop the ability to discriminate between good and bad arguments found in everyday settings, using the concept of fallacy. A variety of kinds of fallacy are explained, and the skill of identifying them is taught. The basic tools for analyzing arguments are presented and put to use. Material for analysis is drawn from newspapers, current periodicals, and other sources of actual arguments. (Prerequisite: 34-160 or 34-161 or semester 3 or above standing; or consent of the instructor.)

34-261. Informal Logic: Argumentation
The objective is to develop the ability to analyze and evaluate extended arguments found in the public media, books and articles, and to construct a well-argued case. (Prerequisite: 34-260 or 34-160 and semester 3 or above standing; or consent of the instructor.)

34-262. Symbolic Logic
The course covers propositional logic as well as an introduction to the basic concepts of predicate logic. Topics include the construction of symbolic representation of natural language sentences, semantic methods for evaluating symbol formulas, and methods of constructing deductions or proofs. (Prerequisite: Semester 3 or above standing, or permission of the instructor. Antirequisite for non-Philosophy majors: 60-231, 62-190.)

34-266. Reasoning about Weird Things
How to evaluate extraordinary claims, such as claims about psychic phenomena (*e.g.* ESP), subliminal messages, crop circles, and water divining. The course may include topics such as: the limits of personal experience as a source of evidence, expert opinion, assessment of studies, scientific method. (Prerequisite: Semester 3 or above standing; or consent of instructor.)

34-273. Ancient Greek Philosophy
The course is a survey of major thinkers and themes in Greek philosophy with particular emphasis on Plato and Aristotle, but may include attention to Pre-Socratic and post-Aristotelian thinkers. The course will concentrate on the main developments in Greek, philosophy, including metaphysics, epistemology, politics, and ethics.

34-276. Early Modern Philosophy
The course will examine the development and major problems of rationalist and empiricist philosophy during the historical period of the rise of modern natural science. It will emphasize the metaphysical and epistemological changes introduced into Western philosophy during this period. Thinkers studied will include Descartes and Hume. Other thinkers examined may include one or more of Bacon, Locke, Berkeley, Spinoza, and Leibniz.

34-280-289. Special Topics
Special Topics courses will be offered occasionally, as resources allow, to meet a demonstrated academic need, where that need cannot be satisfied by any of the regular course offerings. Interested students should inquire in the Philosophy office. (Prerequisites: Semester 3 or above standing and permission of an advisor in Philosophy.)(May be repeated for credit if content changes.)

34- 319. Social Pathologies
The course examines the emergence of pathological forms of social life that systematically undermine human interaction, distort social communication, and falsify individual and group consciousness. The course may explore the work of major social thinkers such as Rousseau, Hegel, Marx, Lukacs, Weber, Schmidt, Freud, Adorno, Marcuse, Arendt, Habermas and Honneth or investigate one or more specific forms of modern social pathologies such as racism, gender inequality, colonialism, extreme poverty, the destruction of the environment. (Prerequisite: 34-221 or 34- 222).

34-321. Advanced Topics in Ethical Theory
This course will examine issues in ethical theory at an advanced level. Topics may include detailed and critical examination of ethical theories, rigorous exploration of the differences between ethics and other kinds of normative practices and theories, meta-ethical questions regarding the nature of the good, or the relation between ethics, politics and other aspects of social life. The authors studied may be wide ranging, depending on the particular focus of the instructor. (Prerequisite 34-221)

34-323. Human Rights and Global Justice
The course will focus on the meaning and nature of human rights and their

relationship to global justice. Topics may include: the historical development of human rights doctrines, their relationship to classical citizenship rights, the relationship between universal human rights and culturally distinct life ways, relationship between legal/moral principles, material reality, and different conceptions of global justice, the strengths and limitations of human rights as principles to advance global justice. (Prerequisite: Semester 3 or above standing, or permission of the instructor.)]

34-329. Animals and Ethics
The course examines philosophical views about our relationship to animals and the relation of these views to the evaluation of moral principles and ethical theories, including notions of justice and rights. It may cover such topics as: attitudes towards animals, animal awareness and autonomy, whether moral consideration should be extended to animals, whether animals have rights. (Prerequisites: Semester 3 standing and at least one prior Philosophy course, or permission of the instructor.)

34-330. Environmental Philosophy
This is an advanced philosophical exploration of some of the key intersections between humanity and the environment. The focus will be on articulating, understanding and evaluating important relations between the human and the non-human environment. Issues covered may include: the philosophy of nature, technology and environment, science and environment, metaphysics and environment, ecofeminism, radical ecology, and environmental politics. (Prerequisites: Semester 3 standing and at least one Philosophy course, or permission of the instructor)

34-342. Philosophy of Education
A critical examination of theories about the nature, goals and values of education. The approach of the course may be historical, contemporary or a combination. (Prerequisites: Semester 3 or above standing and at least one prior Philosophy course, or consent of the instructor.)

34-343. Aesthetics
Aesthetics is concerned with problems which arise in the appreciation of objects which are deemed to have aesthetic value. Problems which may be raised in this course include the nature of aesthetic experience and aesthetic objects such as works of art and nature, as well as problems related to aesthetic value and judgment. (Prerequisite: Semester 3 or above standing.)

34-352. Philosophy and Language
This course will introduce students to philosophical conceptions of language. Its focus may range from an historical overview of the philosophy of language, from either analytic or continental perspectives. Thinkers covered may include Ludwig Wittgenstein, A. J. Ayer, Robert Brandom or Hans Georg Gadamer. (Preequisite: Fifth semester standing).

34-353. Mind, Action, and Personal Identity
An examination of: contemporary views of the nature of mind and its relationship to body; whether human action is free, determined, or both; the relationship between a theory of personal identity and the answers to the preceding questions. (Prerequisite: 34-110 or 34-112 or semester 3 or above standing; or consent of the instructor.)

34-355. Post-structuralist Theory
Philosophers studied in this course may include Derrida, Foucault, Lyotard, Deleuze, and Guattari. (Prerequisite: 34-110 or 34-112, or at least one 200-level Philosophy course, or consent of the instructor.)

34-356. Mind Design and Android Epistemology
This course explores the implications of artificial intelligence and cognitive modelling research for issues in the philosophy of mind and epistemology, including: the nature of mental states; thinking as largely linguistic, and alternatives; and effects of the way we think of mental states on the way we think about reasoning and knowing. (No specific background in science required, but an introductory-level course in psychology or computer science recommended.)

34-357. Philosophy of Science
What is a scientific explanation? A theory? How does observation relate to theory? Do theories describe reality, or are they just conventional tools? The course examines answers to these and similar questions, and the general conceptions of science behind the answers. (Prerequisite: Semester 3 or above standing or consent of the instructor.)

34-359. Women, Knowledge and Reality
An exploration of feminist theories about knowledge and reality that inform and are informed by scholarship in Women's Studies. Students examine how gender might affect identity, reasoning, objectivity, and evidence, and in turn, how such variations might affect feminist political practices. (Prerequisites: Two courses at the 200-level or above from Women's Studies and/or consent of the instructor.) (Also offered as Women's Studies 53-300.)

34-360. Argumentation Theory
Topics may include: the nature and uses of argument; the evaluation of argument; arguments and argumentation; the relations between argument and rhetoric, logic, and pragmatics; linguistic theories of argument; ethics and epistemology related to argument; the role of argument in philosophy. (Prerequisite: 34-260 or 34-261, or consent of the instructor.)

34-370. Philosophy of the Enlightenment
The Enlightenment ushers in a new era in modern philosophy whose tenets are the autonomy of reason in the face of prejudice, individual dignity as the foundation for social justice, moral progress through human perfectibility, and the scientific explanation of the world of nature. This course explores the emergence and development of these ideas in the work of prominent representatives of the Scottish, French and German Enlightenment such as Hume, Smith, Reid, Rousseau, Voltaire, Diderot, D'Alembert, Lessing, Kant, Wollstonecraft, and Herder. (At least third semester standing, and one philosophy course with a middle digit of seven, or permission of the instructor.)

34-376. Kant
A study of the critical philosophical writings of Immanuel Kant. Topics may include Kant's theories about: the limits of human knowledge, how knowledge in mathematics and the natural sciences is possible, whether it is possible to have moral knowledge, whether it is possible to have religious knowledge. (Prerequisite: 34-276, or consent of the instructor.)

34-378. Nineteenth Century Philosophy
Various nineteenth century thinkers may be studied in this course including Kierkegaard and Nietzsche, but also Dilthey, Schopenhauer, Comte, Mill, and others. (Prerequisite: 34-110 or 34-112, or at least one 200-level Philosophy course, or consent of the instructor.)

34-400 to 34-410. Senior Seminars
Senior seminars are the undergraduate sections of M.A. courses. (Normally open only to Philosophy majors in the final year of their program. Consent of the instructor is required. Consult a program advisor during the term preceding planned registration.)

34-426. Legal Philosophy
The objective of this course is to introduce the student to contemporary issues concerning the philosophy of law. Particular emphasis will be placed upon the presupposed relation of concepts to society. The course will examine such issues as the difference and relation of legitimacy to legality, the relation of legal analysis to social needs, the relation of morality and ethicality to the content of legal rules and legal reasoning (Pre-requisite: Final Year of Honour's B.A or M.A. Philosophy students only.) (Cross-listed with 34-526)

34-470. Recent German Philosophy
Significant developments in German philosophy in the twentieth century will be examined. Portions of the course may be devoted to Husserl (the founder of the phenomenological school), Heidegger (a seminal figure in existentialism), Gadamer (a key figure in the development of hermeneutics), Critical Theory (a Freudian and Marxist approach to social and economic issues), and second-generation critical theorists such as Habermas. (Prerequisite: 34-100 or 34-112, or one 200-level Philosophy course, or permission of instructor.)(Cross-listed with 34-570.)

34-471. Recent French Philosophy
A study of significant developments in recent French thought as found in Bergson, Sartre, Merleau-Ponty, Bataille, and Levi-Strauss, for example. (Prerequisite: 34-110 or 34-112, or at least one 200-level Philosophy course, or consent of the instructor.)(Cross-listed with 34-571.)

34-472. Recent British Philosophy
A study of significant developments in recent British thought in this century, as embodied in key works by figures such as Russell, Moore, Wittgenstein, and some

contemporary analytic philosophers. (Prerequisite: 34-110, 0r 34-112, or at least one 200-level Philosophy course, or permission of instructor.)(Cross-listed with 34-572.)

34-473. Recent American Philosophy
A study of major thinkers who shaped recent American thought, with emphasis on the development of pragmatism at the hands of Peirce, James, and Dewey, and the works of recent analytic philosophers such as Quine and Carnap. (Prerequisite: 34-110 or 34-112, or at least one 200-level Philosophy course, or consent of the instructor.)(Cross-listed with 34-573.)

34-476. Advanced Studies in Ancient Or Early Modern Philosophy
An in-depth investigation of a philosopher, text, or movement from either the Ancient or Early Modern period. Topics may include individual dialogues or texts of figures such as Plato, Aristotle, Seneca, Descartes or Hume. Or movements such as the Greek Sophists, Stoics, or British Empiricists. (Prerequisite: 34-273).

34-477. Hegel and German Idealism
A study of early 19th century philosophy centered on the idealism of G.W.F. Hegel, focusing on such problems as the nature of the dialectic, the notion of absolute spirit, and the Hegelian conception of philosophy. (Prerequisite: 34-376, or consent of the instructor.)]

34-491. Honours Seminar
The aim of the seminar is to give students a solid historical background in a given area of philosophy (*e.g.* ethics, epistemology, metaphysics). A philosophical theme is traced through a number of key figures in the history of philosophy. (Open only to four-year Honours in Philosophy students in their final year.)

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PHYSICS: COURSES

Not all courses listed will necessarily be offered in each year.

64-114. Physical Concepts and Numeracy I
The development of critical quantitative thinking in applications of physics to everyday phenomena. The course is designed for general, non-science students but should also serve students majoring in science but weak in problem solving skills. By helping students to sharpen their analytical skills in applications of physical concepts, the course is meant to increase numeracy without being heavily mathematical. It concentrates on mechanics, properties of matter, and heat with the aid of tools such as vectors, functional relationships, their graphical representations, and elements of statistics and error analysis. (3 lecture hours a week.)

64-130. Introductory Physics for Life Sciences I
This is an algebra-based course intended for students interested in the biological or health sciences, or related disciplines. The topics covered include the basic mechanical concepts of force, work and energy, properties of matter, and heat, with examples and applications drawn from the modeling of biological systems. (Prerequisites: one 4 “U” or OAC mathematics course or equivalent.) (3 lecture hours a week, 2 laboratory hours and 1 tutorial hour every week) (Anti-requisites: 64-134, 64-140 and 64-144 .) Open to students in Human Kinetics, Forensic Science, Bachelor of Arts and Science, and all programs within in the Faculty of Science; exceptions only with the permission of the Head or designate.

64-131. Introductory Physics for Life Sciences II
This course is a continuation of 64-134 intended for students interested in the biological or health sciences, or related disciplines. The topics covered include wave motion, sound, electricity and magnetism, light, and an introduction to topics in modern physics involving the life sciences such as the quantum nature of radiation and its interaction with biomolecules, high energy radiation and radioactivity, and the statistical treatment of data. (Prerequisite: 64-130 or 64-140.) (3 lecture hours per week, 1 tutorial hour and 2 laboratory hours every week.) (Antirequisites: 64-135, 64-141, 64-145.) (Open to students in Human Kinetics, Forensic Science, Bachelor of Arts and Science, and all programs within in the Faculty of Science; exceptions only with the permission of the Head or designate.)

64-140. Introductory Physics I
Mechanics; properties of matter and heat. A calculus-based course. (Prerequisites: Grade 12“U” Advanced Functions and Introductory Calculus or equivalent.) Recommended co-requisite: 62-140.) (3 lecture hours a week, 2 laboratory hours and 1 tutorial hour every week). Open to students in Human Kinetics, Forensic Science, Bachelor of Arts and Science, , and all programs within in the Faculty of Science; exceptions only with the permission of the Head or designate. (Antirequisites: 64-130, 64-134, and 64-144).

64-141. Introductory Physics II
Wave motion, sound, electricity and magnetism, light, and modern physics. (Prerequisite: 64-140 or 85-111.) (3 lecture hours per week, 1 tutorial hour and 2 laboratory hours every week.) Antirequisites: 64-145, 64-131, 64-135.) (Open to students in Engineering, Human Kinetics, Forensic Science, Bachelor of Arts and Science, and all programs within in the Faculty of Science; exceptions only with the permission of the Head or designate.)

64-151. From Symmetry to Chaos in the Universe: An Introduction to Theoretical Methods in Contemporary Physics
An introduction to the pillars of 20th and 21st century physics which form the basis of subsequent courses in physics and the basis of current research: complexity and chaos, special and general relativity, quantum phenomena, symmetry and symmetry breaking, and cosmology. Motivated by these pillars, mathematical tools and techniques that are used extensively in physics for practical problem solving and data analysis are introduced at a first-year level. Computer-aided graphical and approximate computational methods will also be introduced. (Prerequisites: 64-140, 62-140, and 62-120) [3 lecture hours and one tutorial hour per week.]

64-190. Introduction to Astronomy I
The solar system with emphasis on the results of recent space exploration. This is

a descriptive course suitable for the non-scientist. (May be taken by B.Sc. students for credit, but does not count as a Physics course or other science option towards the fulfillment of the requirements for the B.Sc. degree.) (2 lecture hours a week.)

64-191. Introduction to Astronomy II
The stars, galaxies, including pulsars, black holes, and quasars. Current theories of the structure of the universe will be discussed. This is a descriptive course suitable for the non-scientist. (May be taken by B.Sc. students for credit, but does not count as a Physics course or other science option towards the fulfillment of the requirements for the B.Sc. degree.) (2 lecture hours a week.)

64-202. Physics and Society-The Past
Discoveries in astronomy have altered the way we perceive ourselves, our planet, and our place in the universe. This course, *'From Antiquity to Newton'*, reviews the contributions made by the Egyptians, Babylonians, Greeks, and Islamic cultures, together with medieval Christian views and on to the emergence of modern science. The course - which is a blend of physics, history, philosophy and religion - will also examine how we came to move from 'geocentric' to a 'heliocentric' view of the solar system, by examining the contributions of Copernicus, Brahe, Kepler, Galileo and Newton. (2 lecture hours a week.) Does not count towards the major requirements for a degree in the Department of Physics.

64-203. Physics and Society-The Present
Modern society is dominated by the dramatic development of physics and technology from the industrial revolution to the present. This development and its impact on society are explored in the course. A number of topics of current interest such as, nuclear energy, world energy supplies, pollution, global warming, climate change, and possible solutions to the energy crisis are discussed in detail. This course gives students who are majoring in the arts, humanities, business, law, and biomedical sciences an introduction to modern ideas in Physics and to see how these ideas affect our day-to-day lives. (2 lecture hours a week.) Does not count towards the major requirements for a degree in the Department of Physics.

64-220. EM Fields and Photons
Electrostatic fields and potentials. Charges and capacitance. Currents and conduction in solids. Magnetic fields; induction; introduction to Maxwell equations, electromagnetic waves, and photons; the photoelectric effect. (Prerequisite: 64-141, or 85-124, or equivalent.) (3 lecture, 3 laboratory hours a week.)

64-222. Optics
Geometrical optics: review of laws of reflection and refraction; lenses and mirrors (matrix optics); stops, optical systems, aberrations. Introduction to wave optics; interferometry, diffraction, polarization, Fresnel equations, elements of dispersion theory. (Prerequisites: 64-141 and 62-141.) (3 lecture, 3 laboratory hours a week.)

64-250. Mechanics
Newton's Laws, Galilean transformations, rotating reference frames, conservation laws, angular momentum and torque, driven oscillators with damping, dynamics of rigid bodies, inverse square forces, Lorentz transformation, relativistic kinematics and dynamics. (Prerequisite: 64-141, and 62-141 or equivalent; recommended: 62-120 or 62-125.) (3 lecture hours, 1 tutorial hour a week.)

64-298. Co-op Work Term I
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.)

64-310. Quantum Physics and Chemistry
Classical and quantum physics, relativistic physics, black-body radiation, photoelectric effect, Compton scattering, atomic structure, Schroedinger equation, particle in a box, harmonic oscillator, conduction in solids; semiconductor and superconductor devices. (Prerequisites: 62-215 and 62-216 or equivalents.) (3 lecture, 3 laboratory hours a week.)

64-311. Atomic and Molecular Spectra
Introduction to atomic and molecular spectroscopy, hydrogen and helium atoms, perturbation theory, isotopes; introduction to nuclear physics. (Prerequisites: 64-

310 or 64-314, 62-215, and 62-216, or equivalents.) (3 lecture, 3 laboratory hours a week.)

64-314. Quantum Physics and Chemistry
(Same as 64-310 without the laboratory.) Classical and quantum physics, black-body radiation, photoelectric effect, Compton scattering, atomic structure, Schroedinger equation, particle in a box, harmonic oscillator, conduction in solids; semiconductor and superconductor devices. (Prerequisites: 62-215 and 62-216 or equivalents.) (3 lecture hours a week.)

64-315. Atomic and Molecular Spectra
(Same as 64-311 without the laboratory.) Introduction to atomic and molecular spectroscopy, hydrogen and helium atoms, perturbation theory, isotopes; introduction to nuclear physics (Prerequisites: 64-310 or 64-314, 62-215, and 62-216 or equivalents.) (3 lecture hours a week.)

64-320. Electromagnetic Theory
Electrostatics, potential theory, boundary-value problems, multipole expansion, electrostatics of ponderable media, magnetostatics, electromagnetic induction, Maxwell's equations. (Prerequisites: 62-215, 64-220.) (Corequisite: 62-216.) (3 lecture hours a week.)

64-323. Electromagnetic Waves
Maxwell's equations in macroscopic media, gauge invariance; electromagnetic waves in a relativistic formulation; propagation, refraction, and reflection at dielectric and metal interfaces; polarization, Stokes parameters; Fourier analysis; transmission lines, wave guides, relativistic dynamics of charges in external fields. (Prerequisites: 64-222, 64-320, and 62-360) (3 lecture, 3 laboratory/tutorial hours a week.)

64-350. Classical Mechanics I
Dynamics of particles and systems of particles; Newtonian mechanics in the Lagrangean formulation; variational principles, conservation laws; symmetry and Noether's theorem; two-body central forces, scattering; small oscillations. (Prerequisites: 64-250, 62-215, and 62-216 or equivalents.) (3 lecture hours, 1 tutorial hour a week.)

64-351. Classical Mechanics II
Rotational motion, non-inertial frames; rigid-body rotations, inertia tensor, Euler's equations, chaotic systems. Hamiltonian formulation; canonical transformations; Poisson brackets, symmetry groups; Hamilton- Jacobi theory; Schroedinger equation. (Prerequisite: 64-350.) (3 lecture hours, 1 tutorial hour a week.)

64-370. Introduction to Medical Physics
Physical principles and experimental techniques applied to medicine and biology. Applications of x-rays and gamma rays in medical diagnosis and therapy. Physical principles of lasers, ultrasound, and magnetic fields in mapping structures. Physical techniques for the diagnosis and therapy of the human body. This course is intended to be of interest to students in Biology and Chemistry/Biochemistry, as well as Physics. (Prerequisite: 64-140 and 64-141, or the consent of the instructor.) (3 lecture hours a week)

64-398. Co-op Work Term II
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.)

64-412. Research
Design, researching, execution and managing, analysis, and reporting (Written and oral) of a supervised physics project in a recognized research laboratory, on- or off-campus. This is a problem-based course with emphasis on team work. Students must present three seminars discussing their research project: on background, on the research plan, and a final seminar accompanying a written report containing the main results, conclusions, and suggestions for further work. With departmental approval, the research may be applied toward partial fulfillment of the M.Sc. degree. (Prerequisites: 64-151) (1 lecture hour, 12 laboratory hours per week over two terms) (6.0 credit hours).

64-420. Classical Electrodynamics
Conservation laws, Bremsstrahlung scattering of radiation, multipole radiations fields, Liénard-Wiechert potentials, Green functions, radiation reaction, Lorentz-Dirac equation, radiation from time-dependent currents. (Prerequisites: 64-320 and 64-323.) (3 lecture hours a week.)

64-431. Introduction to Statistical Mechanics
Thermal equilibrium, diffusive equilibrium; Boltzmann and Gibbs distributions, canonical and grand canonical partition functions; thermodynamics from statistical mechanics, entropy, work, heat; Helmholtz free energy, Gibbs free energy, enthalpy, Gibbs-Duhem relation, equations of state, Maxwell relations, response functions; Planck distribution and thermal radiation, Fermi-Dirac distribution and the Fermi gas, Bose-Einstein distribution and the Bose gas, ideal gas; chemical reactions; binary mixtures; phase transitions; elementary kinetic theory. (Prerequisites: 59-240, 64-310 or 64-314, 64-311 or 64-315, and 59-340 (for Chemistry students only).)

64-450. Quantum Mechanics I
Probability amplitudes and transformations; operators and physical observables; symmetries and conservation theorems; time-development operator and Dyson expansion; two-state systems, density matrices; perturbation theory and the variational method; identical particles, spin, the Thomas-Fermi atom. (Prerequisites: 64-315, 64-350, and 62-360 or consent of instructor.) (3 lecture hours a week.)

64-460. Condensed-Matter Physics
Elements of crystallography, crystal diffraction, reciprocal lattices, lattice dynamics and thermal properties of solids, phonons, solution of Schroedinger equation in periodic potential, band theory, Fermi surfaces of metals and semiconductors, optical properties of dielectrics. (Prerequisite: 64-314 or consent of instructor.) (3 lecture hours a week.)

64-463. Special Topics in Physics
Advanced topics in contemporary physics. (Prerequisite: to be determined according to the topic.) (May be given as a seminar course , or as a directed, self-study course.) (May be repeated for credit when the topic is different.)

64-464. Special Techniques in Health Physics
This course consists of a variety of specialized topics involving the applications of the principles of physics to the study and characterization of living tissues, and the detection and treatment of pathological conditions. Topics will include the applications of acoustic microscopy, computational and statistical methods in medical physics, nanotechnology, and the interaction of ionizing radiation with living tissue. Course may be repeated when the topic is different. (Prerequisite: 64-370, or the consent of the instructor.) (3 lecture hours a week.)

64-470. Radiological Physics
Radioactive decay schemes, interaction of photons with matter, linear and mass attenuation coefficients, stopping power for charged particles, radiation detection and instrumentation. The course will include clinical experience. (Prerequisite: 64-370, or the consent of the instructor.) (3 lecture, 3 lab hours a week.)

64-471. Introduction to Medical Imaging
The course will cover a broad range of modern imaging techniques and their theoretical foundations, such as ultrasound, planar x-ray imaging, computer tomography (CT) imaging, magnetic resonance imaging (MRI), positron emission tomography (PET), and radionuclide molecular imaging. The course will include practical laboratory experience at the University of Windsor, and at the Windsor Regional Cancer Centre. (Prerequisite: 64-370, or the consent of the instructor.)(3 lecture, 3 lab hours a week.)

64-484. Design and Application of Lasers
Stimulated emission, rate equation approach to amplification and output power calculations; Gaussian beams, stable and unstable resonators, Q-switching, mode-locking and cavity dumping, ruby, Nd:YAG and other solid-state lasers, semi-conductor, gas and dye lasers. (Prerequisites: 64-311 or 64-220, and 64-222, or three years of Electrical Engineering or Engineering Materials, or equivalent.) (3 lecture hours a week.)

64-496. Technical Communication Skills
Introductory lectures and workshops on technical writing and instruction, followed by supervised instruction of first-year Physics students in 64-151, and projects in writing resumes and technical manuals and in preparing a multimedia computer

module for a problem area in physics instruction. The computer module can employ any suitable combination of Maple, C++, Visual Basic, HTML, Java. (Prerequisite: 64-151.) (2 lecture, 2 laboratory honours a week.)

64-498. Co-op Work Term III
Supervised experience in an approved career-related setting with a focus on the application of theory and the development of transferable skills. The co-op work experience is designed to provide students with an enriched learning opportunity to integrate academic theory and concepts in an applied setting. (Prerequisite: Student must be enrolled in a co-operative education program. Offered on a Pass/non-Pass basis. Supervised practicum requires the successful completion of a minimum of 420 hours. Students who do not pass the course can not continue in the co-op program.)

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PSYCHOLOGY: COURSES

Not all courses will be offered each year. All courses are three hours a week unless otherwise indicated.

Priority for registration in 300- and 400-level courses may be given to students with General Psychology Majors, Psychology Honours, Developmental Psychology Honours, or Combined Honours.

Note:*46-115 and 46-116 are prerequisites for all other courses in Psychology. Some courses require additional prerequisites.*

46-107. Positive Psychology
An introduction to theory and research pertaining to the study of positive psychology, the psychology of human strengths and coping resources. Selected topics include: happiness, living a meaningful and gratifying life, resilience, hardiness, emotional intelligence, optimism, hope, creativity and moral motivation.

46-115. Introduction to Psychology as a Behavioural Science
Introduction to selected areas in psychology including learning, perception, physiological psychology, emotion, and motivation.

46-116. Introduction to Psychology as a Social Science
Introduction to selected areas in psychology including developmental, social, personality, and clinical.

46-220. Introduction to Adjustment and Personality
A survey of major approaches to the study of personality with a particular focus on the processes involved in adjustment.

46-223. Developmental Psychology: The Child
The study of normal child development from conception to puberty, including physical, cognitive, and social development within the child's family, school, and cultural contexts. Specific topics include temperament, language development, intelligence testing, personality development, and parenting styles.

46-224. Developmental Psychology: Adolescence
The study of normal adolescent development from puberty to early adulthood. Topics include physical changes at puberty, cognitive and social development, and the impact of adolescent development within various contexts, including families, peer groups, and schools.

46-225. Developmental Psychology: Adulthood and Aging
The study of adult development including stages in adulthood, problems of aging, and issues related to death and dying.

46-228 Abnormal Psychology
This course is a survey of psychopathology, with a focus on the structure and application of the Diagnostic and Statistical Manual (DSM) of Mental Disorders. Content to be covered will include historical and contemporary theory and research regarding the etiology and progression of abnormality, including biological, psychological and socio-cultural understandings. Attention will also be given to critiques of classification schemes and diagnosis. Finally, implications for the treatment of specific disorders will be addressed. (Prerequisite: 46-115 and 46-116.) (Antirequisite: 46-233.) (Students may not obtain credit for both 46-348 and 46-228.)

46-230. Social Science Research Methods
Introduction to experimental and non-experimental research methods and designs commonly used in psychology and other social sciences (*e.g.,* experiments, quasi-experiments, survey research, observational studies, content analysis). Includes conducting research exercises/projects dealing with social, personality, developmental, and/or educational issues, writing research reports, and consideration of research ethics. (Credit will be granted for only one of 46-229 and 46-230.) (2 lecture, 2 laboratory hours per week; limited enrolment.) (Antirequisites: 46-229, 95-270.)

46-236. Introduction to Social Psychology
An introduction to the theories, methods, findings, and problems associated with

the study of the individual in the social context. Topics include social cognition; interpersonal behaviour (attraction, aggression, altruism); social attitudes, prejudice, and discrimination; social influence and group processes (conformity, leadership, intergroup relations).(Prerequisites: 46-115 and 46-116.)

46-240. Psychology of Sex and Gender
Review of philosophical, historical, theoretical, and research literature in the psychology of sex and gender. Topics include male/female stereotypes; similarities/differences based on research data; and current social issues.

46-256. Introduction to the Brain and Human Behaviour
Reviews basic research relating brain and behaviour with a focus on human functioning. Includes the study of neuronal and synaptic activity and results from current research and case histories which link human behaviour to basic neuroanatomical and biochemical brain systems.

46-310. Tutorial
Individual projects in specific areas of psychology. (May be repeated once for credit.) (Prerequisites: 46-115, 46-116, and four additional courses in Psychology.)

46-313. Advanced Statistics
Required for students anticipating honours thesis projects in their fourth year. One-way, two-way, and higher order ANOVA, repeated measures ANOVA, multiple comparisons, correlation and univariate regression, introduction to multivariate regression and the general linear model, with an emphasis on computer data analysis. (Prerequisite: 02-250.) (Credit can only be obtained for one of 46-313 or 48-308.) (2 lecture hours, 1 laboratory hour a week.)

46-320. Tests and Measurement
An introduction to basic concepts of psychological testing, with a focus on test development, measurement, and test evaluation. Standard tests used to assess personality, achievement, and aptitudes will be surveyed. (Prerequisite: 02-250.)

46-322. Child Psychopathology
An overview of theory and research related to the assessment, diagnosis, and treatment of childhood and adolescent disorders. Risk factors, vulnerability to stress, and protective factors will be addressed in relation to adjustment disorders, conduct disorder, depression, and anxiety in children and adolescents. (Prerequisite: 46-223 or 46-224.)

46-323. Developmental Disabilities
An overview of theory and research related to the biological foundation of childhood and adolescent developmental disabilities. Mental retardation, sensory and motor impairments, learning disabilities, and disorders with physical manifestations are included in the topics covered. (Prerequisite: 46-223 or 46-224.)

46-324. Educational Psychology
Psychology of the learning process and the variables that affect learning such as intelligence, motivation, attitudes, interpersonal relations, and cultural background. (Prerequisite: 46-223 or 46-224.)

46-327. Psychological Perspectives on Parenting
Contemporary theories and practices of parenting throughout the life cycle, with an emphasis on the psychological aspects of the family system. (Prerequisite: 46-223 or 46-224.)

46-330. Personality Theory and Research
Survey of personality theories and relevant research. Theories may include psychoanalytic, trait, behavioural, humanistic, cognitive, and biological. Some research topics relevant to personality theory will be outlined and illustrated with reference to selected content areas of personality.

46-331. Conducting Research in Psychology
Required for students anticipating honours thesis projects in their fourth year. Topics include: how to generate research ideas, philosophy and place of research in psychology, utilizing research advisors and supervision, using library resources, writing research reports, ethical issues in student research, planning effective research designs, dealing with participant recruitment and data collection, locating research measures, making data analysis decisions, using statistical packages such as SPSS, disseminating research ideas and findings. (Prerequisites: 02-250, 46-229 or 46-230; and consent of the Undergraduate Program Chair.)

46-333 Introduction to Clinical Psychology

This course surveys topics and issues in the field of clinical psychology, including biopsychosocial theories of functioning and dysfunction. Emphasis is placed on major approaches to assessment and treatment (e.g.humanistic, cognitive-behavioral, psychodynamic). The course also will cover the scientific basis for clinical psychology, as well as historical, ethical, professional, cultural and legal issues. Sub-specialties and contemporary issues are also addressed. (Prerequisite: 46-228 or 46-322) (Antirequisite: 46-232.) (Students may not obtain credit for both 46-237 and 46-333.)

46-334. Applied Social Psychology
The application of social psychology to solving social issues. Topics include improving job satisfaction and organizational life, promoting community health, meeting social welfare needs, dealing with environmental problems, improving educational systems, and addressing the issues of social justice and equality. The course may involve a fieldwork component. (Prerequisite: 46-236.)

46-335. Human Sensation and Perception
The study of underlying mechanisms and processes of human sensation and perception, methods of measuring human sensory abilities, and the perceptual processes for integrating and interpreting such information. (Prerequisite: 46-229 or 46-230.) (2 lecture, 2 laboratory hours per week.)

46-337. Human Cognitive Neuroscience
Issues relevant to the brain and human behaviour. Recent research selected from areas of developmental, cognitive, and clinical neuropsychology. Introduction to cognitive neuroscience modelling. (Prerequisites: 46-115, 46-116, either 46-256 or 55-204 and three additional courses in Psychology.)

46-339. Health Psychology
Application of psychology to the areas of health promotion, prevention and treatment, and improvement of health-care delivery. Theory, research, and practice in health psychology and behavioural medicine will be examined. Specific areas of emphasis may include stress, illness, and coping; patient-practitioner interaction; adjustment to chronic illness; reproductive health issues; and cross-cultural conceptions of illness and healing. (Prerequisite: 46-236.)

46-342. Culture and Psychology
This course examines psychological theory and research on the commonalities and variations in human behaviour within and across cultures. Topics may include individualism and collectivism, perspectives on the self, communication and interpersonal relations, intergroup relations, organizational behaviour, and the consequences of cross-cultural contact. (Prerequisite: 46-236.)

46-350. Practical Strategies for Social Change: Intervening to Prevent Sexual Assault
This course provides male and female students with an introduction to sexual violence as a social problem. The course addresses how this social problem manifests, why it matters, how it persists, and finally, how it can be changed. The importance of personal and community responsibility for social change is emphasized. This course also provides students with the background knowledge that is needed to successfully teach sexual assault prevention education sessions for fellow students, using the *Bringing in the Bystander® In Person Prevention* workshop. Selected students will deliver the workshop by taking Practicum in Social Change (02-450/46-450/47-450/48-451/53-450) the following semester. Restricted to students who have attained a cumulative GPA of 66% or higher at the time of application. (Prerequisite: Semester 4 standing or above and permission of the instructor by online application at uwindsor.ca/bystander.) (Also offered as 02-350, 47-350, 48-350, and 53-351.)

46-353. Learning and Behaviour
Basic principles and theories of classical and operant conditioning and their application to human behaviour. (Prerequisite: 46-229 or 46-230.) (2 lecture, 2 laboratory hours per week.)

46-355. Comparative Psychology
Introduction to animal behaviour from the viewpoint of its role in the natural life of the individual and the species. A synthesis of contributions by comparative psychologists, ethologists, ecologists, and zoologists. (Prerequisites: 46-115, 46-116, and four additional courses in Psychology.)

46-358. Cognitive Processes
A review of current contributions to the understanding of attentional, memory, problem solving, and reasoning processes. (Prerequisite: 46-229 or 46-230.) (3

lecture, 1 laboratory hours per week.)

46-370. Industrial-Organizational Psychology
The study of employees, workplaces, and organizations. Topics include job analysis and competency models, recruitment, selection, and decision making, performance management, training, group and team processes in organizations, employee attitudes, affect, and behaviour, motivation, leadership, productive and counterproductive work behaviour. (Prerequisites: 46-115 and 46-116; or Labour Studies students with at least Semester 4 standing; or consent of instructor.) (Also offered as 54-370.)

46-400. Selected Topics in Psychology
Seminar on a selected topic in psychology. Content will vary with instructor. (Prerequisites: 46-115, 46-116, four additional courses in Psychology, including courses as specified by the instructor.) (May be repeated for credit if content changes.)

46-415. History and Systems of Psychology
The emergence and development of psychology as a science. A review and evaluation of major systems of psychology, such as structuralism, functionalism, behaviourism, Gestalt psychology, and psychoanalysis. Emphasis will be placed on the contributions of the systems to contemporary theoretical conceptions and trends. (Prerequisites: 46-115, 46-116, and four additional courses in Psychology.)

46-420. Psychology of Music
A study of the principles underlying the practice of music therapy and musical behaviour. The study of psychological aspects of musical behaviour: psycho-acoustics, music perception, affective and physiological responses to music, music learning, and measurement. (Open to non-Music majors.) (Prerequisite: 32-120 or consent of the instructor.) (Also offered as Music 32-420.)

46-421. The Psychology of the Family
An analysis of theory and research examining the impact of family context on individual development throughout the life cycle. (Prerequisites: 46-223; restricted to 4th year Psychology/Developmental Psychology majors).

46-422. Advanced Developmental Psychology: Emotional Development
This seminar examines issues related to emotional development from infancy through adult years. The experience, expression, and regulation of emotion will be discussed from various historical and academic perspectives. (Prerequisite: 46-223 or 46-224.)

46-423. Advanced Developmental Psychology: Cognitive Development
An examination of current theories, research methods, and findings in the area of cognitive development. (Prerequisite: 46-223 or 46-224.)

46-424. Advanced Developmental Psychology: Social Development
This seminar examines established and newly-emerging theories of development and their impact on social development research. Emphasis is placed on describing social developmental outcomes (e.g., gender, emotion, morality), and the influence of biological factors (*e.g.,* temperament) and socialization agents (*e.g.,* parents, media) on such outcomes. (Prerequisite: 46-223 or 46-224.)

46-425. Seminar in Developmental Psychology
Focus on a particular topic within the area of developmental psychology. Topics will vary from term to term. (May be repeated for credit.) (Prerequisites: 46-115, 46-116, 46-223 and three additional courses in Psychology.)

46-427. Methods of Behavioural Change
Survey of theories and methods of behavioural change, including behavioural assessment and analysis, relaxation training, graduated exposure, contingency management, and cognitive restructuring. (Prerequisite: 46-335 or 46-353 or 46-358.)

46-428. Practicum in Developmental Psychology
Supervised practicum in learning-based behaviour change strategies. Students will practice behavioural assessment and systematic remediation of clinical problems through application of operant techniques in community placements. (A 6.00 credit hour course.)((Restricted to 4th year Developmental Pschology majors with cumulative and major averages of at least 70%.) (Prerequisites: 46-427 and consent of instructor.) (Antirequisite: 46-429.) (1.5 lecture hours and 8 practicum hours per week.)

46-429. Practicum in Psychology

Supervised practicum in a university or community setting. Students will consolidate and enhance their knowledge about psychology and skills in connection with a specific project, activity, or task. The practicum experience may include the opportunity to be involved in some aspect of community change, peer counselling, or research, among other possibilities. (A 6.00 credit hour course.) (Prerequisites: consent of instructor; restricted to 4th year Psychology majors with cumulative and major averages of at least 70%.) (Antirequisite: 46-428.) (1.5 lecture hours and 8 practicum hours per week.)

46-430.Clinical and Counselling Psychology
The principles and techniques underlying clinical interviewing and modern psychotherapeutic methods. Emphasis will be placed upon the application of clinical interviewing and modern psychotherapeutic methods, as well as the application of clinical methods in clinics, hospitals, schools, mental health settings, and community agencies. (Prerequisites: 46-333.)

46-432.Community Psychology
An examination of societal and environmental influences on the community and individual community members, the development of the community mental health movement, and current issues in theory, research, and practices in community psychology. Emphasis will be placed on prevention, crisis intervention, and effecting social change. An overview of community-based professional and volunteer services will be presented. Community responses to issues such as homelessness, suicide, and violence against women will be considered. (Prerequisite: 46-236.)

46-433.Seminar in Law and Psychology
Issues in the interaction between law and psychology; discussion of the use/misuse/nonuse of behavioural sciences in the law; emphasis on how psychology can best be applied to family, criminal, and civil law. (Prerequisites: 46-115, 46-116, and four additional courses in Psychology.)

46-436.Seminar in Psychopathology
Focus on a particular topic within the area of abnormal behaviours. Topics will vary from term to term. (Prerequisites: 46-333 and 46-348.)

46-440.Seminar in the Psychology of Women
An examination of the feminist critique of mainstream psychology research of the last century, of feminist approaches to research and theorizing, and applications of feminist psychology to the study of a number of topics in the psychology of women (*e.g.,* mental health, violence against women, sexuality). (Prerequisite: 46-240 or consent of instructor.)

46-441.Special Topics in Health Psychology
This specialized course is designed for students who wish to pursue their interests in health psychology in greater depth. The course will focus on a particular topic within the area of health psychology, and topics will vary from term to term, depending on the emphasis of the instructor. Possible special topics could include Women's Health, Personality and Health, and the Social Psychology of Health. (Prerequisite: 46-339.)(May be repeated for credit if content changes.)

46-445. Stereotyping, Prejudice, and Discrimination
Psychological theory and research on stereotyping, prejudice, and discrimination; their formation and function; the role of individual and sociocultural factors in their development and maintenance; individual responses and psychological interventions. (Prerequisite: 46-236.)

46-450. Practicum in Social Change
Supervised practicum in a university setting. Students consolidate and enhance their knowledge of sexual assault and bystander intervention. Students co-facilitate the *Bringing in the Bystander® In Person Prevention* program for one or more small groups of students on campus. The practicum experience equips students to deliver educational content on sensitive issues. (Prerequisite: 02-350/46-350/47-350/48-350 and permission of the instructor.) (Also offered as 02-02-450, 47-450, 48-451, and 53-450.)

46-457. Comparative Cognition
Evidence of general and specialized cognitive processes in human and nonhuman organisms will be investigated. Topics to be covered include memory systems, concept formation, and nature of stimulus representation. Current research on these and other topics will be reviewed and analyzed. (Prerequisite: 46-335 or 46-353 or 46-358.)

46-475. Popular Literature in Psychology
A forum for critical examination and analysis of popular literature written by psychologists or others functioning in the role of counselor or lay expert. The main goal is to identify both traditional and novel criteria for assessing the validity of popular literature and its contribution to knowledge. (Prerequisites: 46-115, 46-116, and four additional courses in Psychology.)

46-496. Thesis: Seminar
Experience in conducting psychological research is viewed as necessary for graduate work in psychology. This course is designed to provide such experience through planning, developing, and writing a research proposal under individual faculty supervision. Group sessions on research ethics, procedures, writing, and data analysis. (Prerequisites: either 46-229 or 46-230; 46-313 or equivalent; 46-331;46-320; a cumulative average of at least 75%; a major average of at least 78%; and consent of Undergraduate Program Chair.) (Prerequisites for B.Sc. Honours Behaviour, Cognition and Neuroscience students: either 46-229 or 46-230; 46-313 or equivalent; 46-335, 46-353, and 46-358; an average of 78% or higher in Psychology courses; and consent of Undergraduate Program Chair.)

46-497. Thesis: Research
Students will conduct and write an undergraduate thesis under individual faculty supervision. (The thesis is developed and begun while taking 46-496). (Prerequisite: 46-496.)

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FACULTY OF ARTS AND SOCIAL SCIENCES

SOCIAL JUSTICE STUDIES: COURSES

38-101. Introduction to Social Justice
The course will explore diverse visions and dimensions of social justice, both past and present. It will examine the role of political economy, culture, and identity in addressing injustice in Canada and globally. It will critically assess different strategies for social change. Students will be introduced to the principles governing the production and distribution of benefits and harms, and to such concepts as distributive justice, politics of difference, civil society, empowerment, critical pedagogy, citizenship, and human rights.

38-321. Social Justice Seminar
An inter-disciplinary exploration of the role of the state, alternative media, arts, literature, critical pedagogy, international and domestic law, social movements, non-governmental agencies, international governmental agencies, and scholars in bringing about social change. (Prerequisites: 38-101 and semester 5 standing.)

38-447. Practicum in Social Justice and Labour Studies
This course offers students the opportunity to apply their academic knowledge in a practical setting. Students will be placed with organizations dedicated to the pursuit of social justice and/or labour issues in the Windsor area. Students will be assigned a major project to be completed under the supervision of the course instructor and an on-site practicum supervisor. Students will be expected to contribute a minimum of three hours per week , meeting regularly with course instructor to provide oral and written reports. This course is open to Social Justice and Labour Studies majors only. Also offered as Labour Studies 54-401. Prerequisites: 38-321 or 54-301 and semester 5 standing.

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SOCIAL WORK: COURSES

Social Work courses 47-117, 47-118, 47-204 and 47-210 are open to all students in the University. Social Work course 47-211 is for Social Work majors, Combined Social Work/Women's Studies, and Combined Social Work/Diaspora Studies majors only. Acceptance to the professional years (Years 3 and 4) of the B.S.W. program is required for registration in all other required 300 and 400 level courses. All Social Work elective courses in the professional program at the 300 and 400 level are restricted to senior level (*i.e.,* beyond term 4) students in Social Work or cognate disciplines or require the permission of the instructor. Social Work majors will be given priority when registering for these courses.

All courses are three hours a week unless otherwise indicated.

***Note:* The term “Social Work major” includes combined majors in Social Work and another program.

Social Work electives can be taken interchangeably by Year 3 and Year 4 students, except where prerequisites have been identified.
Not all courses listed will necessarily be offered each year.

47-117. Meeting Human Needs through Social Welfare
This course examines the historical, philosophical and political aspects of the development and delivery of the Canadian Social Welfare System. Special attention will be focussed on ways to identify and assess the needs of, and services to, vulnerable populations within the context of social and cultural diversity.

47-118. Meeting Human Needs through Social Work
This course examines the ways in which social workers in generalist practice intervene to meet the needs of clients within the Canadian social welfare system. Attention will be paid to the development of an understanding of generalist social work practice within an ecological and systems perspective.This course provides an introduction to social work processes. Attention will be given to the needs of vulnerable and marginalized populations within traditional and alternative social work perspectives such as ecological, systems, strengths, feminist, and anti-oppressive practice. Students will gain an understanding of personal, professional, agency, and societal needs and values and how they influence social work practice. Students will be introduced to the generalist social work practice perspective within a problem-solving process that includes focused assessment, intervention, termination, and evaluation of practice. Ethical and professional issues such as confidentiality and accountability will be introduced.

47-204. Issues and Perspectives in Social Welfare
Examines various ideologies that underpin the social welfare system and their impact on citizens, clients, communities, organizations, and society as a whole. The impact of these diverse perspectives on the different roles of social workers are examined with particular emphasis on value conflicts and how these conflicts shape and affect policies and programs. Further, the role and development of professional ethics relative to social service delivery through social welfare systems are explored.(Prerequisites: 47-117 and 47-118 or permission of instructor.)(Students may not take both 47-204 and 47-302 for credit.)

47-210. Social Work and Diversity
This course examines oppression and anti-oppressive social work practice from a broad ecological framework as they relate to social inequality and life circumstances. Various forms of oppression such as racism, ableism, anti-semitism, heterosexism, and sexism are analyzed at the individual, cultural, and institutional level while applying the professional values and ethics of social work practice. The experiences, needs, and responses of populations that have been historically excluded, marginalized, and disadvantaged are examined. Students develop analytical and self-reflective skills as they relate to social work practice which fosters inclusion, participation, advocacy, and social justice. (Prerequisites: 47-117 and 47-118 or permission of instructor.)

47-336. Theory and Practice of Social Work with Individuals
This course examines the knowledge base, principles and techniques of social work generalist practice and the use of social work values in the context of offering

help focusing on individuals (micro-level). Included are the use of interpersonal relationships as a medium for helping and the use of theories of human interaction within various systems as a base for problem assessment. Emphasis will be on practice with individuals in their social context. (Must be taken prior to field education courses)

47-337. Theory and Practice of Social Work with Small Groups
This course builds upon the generalist practice model of social work presented in 47-336. It extends generalist social work concepts to small groups as client systems. Focus will be on analysis and application of generalist knowledge, values and skills for assessment and intervention with small groups. (Must be taken prior to field education courses) (Must be taken concurrently with 47-336).

47-338 Theory and Practice of Social Work with Families
This course builds upon the generalist model of social work practice. It extends generalist social work concepts to families as multi-client systems. Focus will be on analysis and application of generalist knowledge, values and skills for assessment and intervention with families. (Prerequisites 47-336 and 47-337) (Must be taken prior to or concurrently with 47-371.)

47-339. Theory and Practice of Social Work with Communities and Organizations
This course applies the generalist social work practice model at the macro level. It focuses on planning, implementing, and evaluating interventions with communities and human service organizations. Special emphasis will be placed on addressing the needs and issues of diverse, at-risk, and oppressed populations. (Prerequisite: 47-336 and 47-337.) (Must be taken prior to or concurrently with 47-371.)

47-344. Research I: Foundations of Social Work Research
This course will prepare students to critically analyze generalist social work practice research. Foundation principles of rational and empirical inquiry will be examined across the continuum of qualitative and quantitative research designs that can be appropriately used in various practice contexts. It aims to enable the practical interpretation of research used integratively in practice with diverse clients, particularly those at risk of being marginalized or oppressed. (Prerequisite: 3rd or 4th year Social Work Major or Combined Major in Social Work, or permission of instructor.)

47-346. Risk and Resilience: Perspectives on Human Development
Examines human development in the social environment from a strengths-based perspective. Using a biopsychosocial orientation, emphasis is placed on identifying risk and protective factors that affect coping and adaptation to stressful life events. Focuses on how social systems (families, groups, organizations, institutions, and communities) promote or deter such efforts. Implications for multilevel interventions are discussed and evaluated. (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-347. Social Work and Violence
Examines aspects of violence in society, particularly against marginalized groups. The primary focus is on generalist social work intervention related to violence. (Open to senior students. Required course for Social Work/Women's Studies students; elective for BSW students. Pre-requisite: One Women's Studies (53-) course or permission of the instructor. (Also offered as 53-347.)

47-350. Practical Strategies for Social Change: Intervening to Prevent Sexual Assault
This course provides male and female students with an introduction to sexual violence as a social problem. The course addresses how this social problem manifests, why it matters, how it persists, and finally, how it can be changed. The importance of personal and community responsibility for social change is emphasized. This course also provides students with the background knowledge that is needed to successfully teach sexual assault prevention education sessions for fellow students, using the *Bringing in the Bystander® In Person Prevention* workshop. Selected students will deliver the workshop by taking Practicum in Social Change (02-450/46-450/47-450/48-451/53-450) the following semester. Restricted to students who have attained a cumulative GPA of 66% or higher at the time of application. (Prerequisite: Semester 4 standing or above and permission of the instructor by online application at uwindsor.ca/bystander.) (Also offered as 02-350, 46-350, 48-350, and 53-351.)

47-355. Feminist Social Work Practice
This course prepares students to apply the principles, processes, and techniques

of feminist social work practice. Required course for Social Work/Women's Studies students; elective for BSW students (Prerequisites:(47-336, 47-337 plus three (53-xxx) Women Studies courses or, consent of instructor.) (Also offered as 53-355)

47-356. Serving Older People
The role of the social worker in such areas as institutionalization, community care and social support, separation and loss, family structures, and retirement, with emphasis on social policy as a determinant of services and practice. (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-357. Child Welfare
Examines issues in the present structure and functioning of services for children. The rights of children and their need for services will be examined in relation to existing services, such as protection, adoption, foster care, health services, and compulsory education, with special attention to extra-family parenting responsibilities. (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-371. Field Education Preparation
The Field Education Preparation course (47-371) examines student progress in the social work program with the purpose of evaluating student readiness for a field practicum. Students will demonstrate the foundation level social work knowledge, skills, and values required to meet field education expectations and to ensure success in the field. The course integrates classroom and field learning through co-instructed learning sessions that include skill development facilitated by Field Learning Specialists with extensive practice experience, community resources training from community agencies and practicing professionals, exposure to service users, and assignments that require interaction with agencies and the community. This course will facilitate student development and growth on personal, professional, and civic levels. In addition, the course will ensure a smooth transition from the classroom setting into the field setting by demonstrating how connecting theory and practice results in successful individual, family, group, and community intervention. Finally, the course facilitates the development of professional, reflective, self-evaluating, and competent social workers. (Pre-requisites 47-336 and 47-337. Correquisites 47-338 and 47-339).(Contact Hours: 3.0)

47-410. Social Work and the Law
Explores the evolution of law in our society, along with a critical examination of the institutions which law has spawned. The legislative, administrative, and judicial functions of law will be studied in terms of their social implications. Significant current legislation will be reviewed to understand the context, purpose, development, and impact. Finding, tracking, referencing, and analyzing legislation is an integral part of this course. (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-412. Selected Topics in Social Work
Selected topics according to faculty and student interests may be offered. Topics may include issues related to social work practice, social welfare, or fields of practice. (May be repeated for credit if the course content differs.) (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-416. Social Work and Intersectionality
This course is a capstone course for all BSW students in their final year, providing an opportunity for students to synthesize their course and field work through a lens of intersectionality (Prerequisites: 47-336,47-33747-338,47-339,47-344, 47-371)

47-423. **Social Policy and Social Welfare**
This course introduces the student to the formulation and analysis of social policy. The student uses knowledge of social services as a basis for assessing and recommending changes in existing programs or services, and for introducing new services. Special attention is given to identifying policy gaps in services and unmet needs of vulnerable populations within the general practice framework. (Prerequisite: 4th year Social Work Major or Combined Major in Social Work, or permission of instructor.) (Credit cannot be obtained for both 47-303 and 47-423).

47-430. Integration Seminar I
The Integration Seminar I course is taken concurrently with the Field Education I course (47-473). This seminar course builds on the knowledge, skills, and values developed in the theory and practice courses 47-336, 337, 338 & 339, along with

problem solving models covered in 47-344 and 47- 371. The focus of learning for this course will be the application of concepts from theories and practice models to the process of assessment and intervention planning. The seminar enables students to integrate academic learning and field work experience to test and advance social work knowledge, values, and skills in preparation for professional social work practice. The course will provide students with opportunities to share their field placement experiences with the instructor and peers. This course will include classroom instruction, simulations, self reflection, discussions, group sharing and problem solving, and presentations to facilitate the development of professional, reflective, self-evaluating, and competent social workers. (Prerequisites: 47-371, 47-336, 47-337, 47-338, 47-339, 47-344) (Co-requisite: 47-473)

47-431. Integration Seminar II
The Integration Seminar II course is taken concurrently with the Field Education II course (47-475). This seminar course builds on the knowledge, skills, and values developed in Field Education I (47-473) and Integration Seminar I (47-430). The seminar enables students to integrate academic learning and field work experience to test and advance social work knowledge, values, and skills in preparation for professional social work practice. The course will provide students with opportunities to share their field placement experiences with the instructor and peers. Students will participate in a variety of activities, including self reflection, discussions, group sharing and problem solving and presentations to facilitate the development of professional, reflective, self-evaluating, and competent social workers. Students will be expected to engage in critical reflection to integrate knowledge and skills from generalist practice into their own developing practice framework. (Pre-requisite: 47-430, 47-473) (Co-requisite: 47-475).

47-434. Social Work with Children
This course is designed to provide students with knowledge and understanding of social work practice with children. The focus is upon the development of a framework of knowledge for making practice decisions involving the child client. The design, implementation, and evaluation of alternative social work intervention strategies are included. The special set of techniques utilized in social work practice with children will be highlighted. (Open only to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-448. Professional Issues in Social Work
This course examines topics of current relevance for the profession of social work. Professional issues such as social control, suitability, ethical dilemmas, work-place issues of power, oppression and marginalization will be considered. The Social Work Code of Ethics will be used as the "lens" to explore case examples of situations that present professionals with ethical dilemmas, that challenge personal and professional values and require a sound grounding in professional ethical decision-making in the face of grave circumstances. Empowerment practice will serve as an integrative framework for the consideration of professional issues. (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-450. Practicum in Social Change
Supervised practicum in a university setting. Students consolidate and enhance their knowledge of sexual assault and bystander intervention. Students co-facilitate the *Bringing in the Bystander® In Person Prevention* program for one or more small groups of students on campus. The practicum experience equips students to deliver educational content on sensitive issues. (Prerequisite: 02-350/46-350/47-350/48-350/53-351 and permission of the instructor.) (Also offered as 02-02-450, 46-450, 48-451, and 53-450.)

47-455. Social Work and Mental Health
This course focuses on social work practice in the field of mental health. It will integrate policy, practice and research to mental health issues across the life-span. The course will examine social work practice assessment and intervention techniques. Both chronic and acute mental health issues will be examined. Community-based care and institutional care perspectives will be presented. (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-456. Social Work and Health
Explores generalist social work practice with various client systems in transaction with the Canadian health care system. Systems' structural characteristics as well as their philosophical underpinnings will be surveyed in a historical and theoretical context. This will be accomplished with current social work models using the

person-in-environment framework and general systems theory. (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-457. Social Work and Addictions
Provides social work students with practice knowledge concerning the etiology, implications, and treatment issues related to addictions and substance abuse. Topics will include the history and consequences of addictions and substance abuse, addictions and the family, special at-risk groups, social policy and legal issues, medical and social-psychological aspects, and current research issues as well as the implications for intervention. (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-458. Women's Issues and Social Work
Examines gender issues, social processes and policies which construct women's realities in the context of a diverse society. The course will critique issues such as: poverty, equality, unemployment and welfare, child-care, reproductive rights, mental health, physical health and domestic violence. (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-459. Social Work and Criminal Justice
The role of social work in various correctional areas and the place of corrections within the criminal justice field will be critically examined, along with some of the issues which currently confront these fields of practice. Emphasis throughout will be on the community context of practice and reference to such concepts as prevention, recidivism, and treatment will be discussed in terms of the implications for practice. (Open to senior students. Social Work Majors and Combined Majors in Social Work will be given registration priority.)

47-461. Field Practice II – A
Provides students with professionally supervised experience in community agencies and programs and with opportunities to carry generalist social work practice responsibilities. Provides enhanced opportunities to integrate knowledge and skills sufficient for responsible entry into social work practice upon graduation. (Open only to fourth-year Social Work Majors and Combined Majors in Social Work.) (Must be taken concurrently with 47-436 and 47-462.) (100 hours per semester, normally 1 day per week.)

47-462. Field Practice II – B
(Open only to fourth-year Social Work Majors and Combined Majors in Social Work. Must be taken concurrently with 47-436 and 47-461. 100 hours per semester, normally 1 day per week.)

47-463. Field Practice II – C
(Open only to fourth-year Social Work Majors and Combined Majors in Social Work. Must be taken concurrently with 47-437 and 47-464. 100 hours per semester, normally 1 day per week.)

47-464. Field Practice II – D
(Open only to fourth-year Social Work Majors and Combined Majors in Social Work. Must be taken concurrently with 47-437 and 47-463. 100 hours per semester, normally 1 day per week.)

47-473. Field Practice I
The Field Education I course examines student progress in the field practice component of the Bachelor of Social Work program with the purpose of evaluating student readiness for Field Education II. Students will demonstrate the foundation level social work knowledge, skills, and values required to meet field practice expectations and ensure success in Field Education II (47-475). This course integrates classroom and experiential learning through placement in a community organization. Under the supervision of professional social workers, students are expected to apply beginning level knowledge, skills, values and ethics to generalist social work practice in “real-life” situations. The objectives and competencies outlined in the Field Education I Learning Agreement are minimum expectations for all students. The course fosters professional development wherein personal and professional skills are promoted in the interest of competent professional practice. Students will develop competence as an entry level professional in generalist social work practice within the four contexts of practice: organization, community, social work skills and professional context. Supported by Field Learning Specialists with extensive practice experience and professional social workers, students will develop substantive understanding of social work knowledge, values and skills and demonstrate an understanding of and

commitment to the principles which underlie professional social work practice. (Prerequisites: 47-371, 47-336, 47-337, 47-338, 47-339, 47-344) (Co-requisite: 47-416, 47-423, 47-430).

47-475. Field Practice II

The Field Education II course (47-475) examines student progress in the field practice component of the Bachelor of Social Work program with the purpose of evaluating student readiness for professional social work practice. This course takes place in the approved field education agency in which the student successfully completed Field Education I (47-473). Under the continuing supervision of professional social workers, students are expected to develop competencies that go beyond the generic base acquired during Field Education I (47-473). Students are expected to build upon the knowledge, values and skills acquired in Field Education I to move along the continuum from beginning level social work knowledge to an increasingly complex level of skill development in generalist social work practice. The objectives and competencies outlined in the Field Education II Learning Agreement are minimum expectations for all students. Students will apply professional skills and techniques as well as analytical competence to work with direct and indirect systems in an agency/community setting to develop an understanding of the relationships between human behaviour and societal processes. Students will demonstrate self-awareness and self-discipline sufficient to enable students to apply their knowledge, values, and skills when working with client systems. Supported by Field Learning Specialists, this course will result in the development of critical thinking skills and an inquiring interest in professional issues and knowledge, along with a commitment to the ethical principles of Social Work and the development of a professional identity. This course operates as a practicum four days a week for 16 weeks. (Prerequisites: 47-416, 47-473, 47-430) (Co-requisite 47-431)

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SCHOOL OF CREATIVE ARTS

VISUAL ARTS: COURSES

Not all courses listed will necessarily be offered each year. Studio courses are either three hours a week or six hours a week, depending on the medium and level of study. See below for details. Art History courses are three hours a week unless otherwise indicated. Prerequisites for all Art History courses are waived for non-Visual Arts majors.

6 hour Studio Courses: 27-105, 27-106, 27-107, 27-108, 27-203, 27-213, 27-223, 27-233, 27-245, 27-303, 27-313, 27-343, 27-345, and 27-386.

3 hour Studio Courses: 27-253, 27-290, 27-326, 27-333, 27-346, 27-347, 27-348, 27-383, 27-384, and 27-385.

27-105. Studio Practice and Ideas/Space
An investigation of the principles, vocabulary and concepts of space-based art, including but not limited to sculpture and installation. Using traditional and contemporary materials, processes and practices, students will gain knowledge and experience through the exploration of the creative possibilities of three-dimensional space. (Lab Fees may apply.)

27-106. Studio Practice and Ideas/Image
An introduction to the fundamental skills and critical concepts of visual perception and production common to all areas of 2 dimensional image-making. Basic principles of composition and design, light and pigment-based colour theory, as these apply to painting, photo-based processes, and print production. Their use and application will be will be explored within the contemporary art context. Class projects may involve inter-disciplinarity between these media. Studio assignments are combined with related critical theory, historical practice and current strategies.

27-107. Studio Practice and Ideas/Drawing
An investigation of a variety of drawing processes, materials and concepts in a studio environment that fosters exploration. (Lab fees may apply.)

27-108. Studio Practice and Ideas/Time-Based
An investigation of the principles, vocabulary and concepts of time-based arts including digital media. Students will gain knowledge of the creative possibilities of emerging technologies and will develop a basic understanding of methods, tools and techniques of time-based media.

The following courses are open to Visual Arts students only.

27-203. Introductory Drawing
Media, techniques, vocabulary, and concepts of drawing, including the human figure and other subject matter. Development of drawing skills with exposure to more complex drawing situations, approaches, and points of view. Emphasis on a variety of materials (traditional and non-traditional). (Prerequisites: 27-105, 27-106, 27-107, 27-108.) (Lab fees may apply.)

27-213. Introductory Painting
Introduction to traditional and contemporary painting concerns, problems in rendering three-dimensional form in space and organization of the two-dimensional surface. (Prerequisites: 27-105, 27-106, 27-107, 27-108.) (Lab fees may apply.)

27-223. Introductory Printmaking-Intaglio
Introductory and intermediate techniques of contemporary printmaking practice are taught through Intaglio. The techniques of etching, engraving and monoprints are emphasized. (Prerequisites: 27-105, 27-106, 27-107, 27-108.) (Lab fees may apply.)

27-233. Introductory Sculpture
An introduction to the various concepts and processes of contemporary sculpture practice. Issues will be addressed through group discussion and practical application. (Prerequisites: 27-105, 27-106, 27-107, 27-108.) (Lab fees may apply.)

27-243. Introductory Time-Based Art
An investigation of the principles, vocabulary and concepts of time-based art. Emphasis is on exploring the potential of video for art projects as well as for community action in an experimental and critical environment. Assignments and screenings will stimulate students to explore issues inherent to time-based strategies in contemporary art as well as give a background to its brief history. (Prerequisites: 27-108 or permission of the instructor.) (Lab fees may apply.)

27-245. Digital Media and Images
This course introduces students to the tools used to create art in virtual space, the history and investigation of the social, cultural and aesthetic issues pertinent to digital art making. (Prerequisites: 27-105, 27-106, 27-107, 27-108.) (Lab fees may apply.)

27-253. Introductory Photography
This introductory course in film and chemical photographic processes provides an opportunity for students to explore techniques and concepts within the medium of photography. Students will learn the basic technical skills of operating cameras, processing film, and making black and white prints, through a series of concerns specific to photography. (Prerequisites: 27-105, 27-106, 27-107, 27-108.) (Also offered as Communication, Media and Film course 40-205.) (Students must have a 35mm adjustable film camera to complete this course.) (Lab fees may apply.)

27-255. From 2D to 3D - Playing with Space
How do we experience space? What are the elements that animate and activate a space? How have artists used space to communicate and investigate current issues within culture and society? From subtle cues such as temperature and smell, to the more obvious such as colour, texture, sound and construction, students will investigate the sensory, narrative and critical aspects of installation where space itself becomes our medium. In this studio-based course, students will bridge the gap between 2D image and 3D structure as an introduction to the processes used by artists to explore and manipulate space. Students will also look at current debates surrounding installation art and the gallery as “white cube.” This course is not limited to any particular medium, and students may respond in any medium offered within the School of Creative Arts. (Prerequisite: one “27-” course at the 100-level.)

27-263. Sonic Art
An introduction to techniques for creating sound-based art, including sound recording, editing and processing, sample-based timbre design, soundscape composition, and MIDI-based electronica. (Pre-requisite: 32-102 or 27-108 or 32-112 or permission of the instructor.) (Also offered as 32-232 Music Technology.) (Lab fees may apply.)

27-285. Learning by Living in an International Urban Setting
This course develops the capability to describe and reflect upon the everyday rhythms and challenges of learning in a new culture and urban environment and finding expressive ways to communicate the experiences and challenges of learning to others. As an exploration of living in an Italian city, students will examine films, literature, music, theatre, or other expressive forms that reflect Italian and European urban life. Students will write weekly blogs about their own experiences, perceptions and understanding of Italian culture and living abroad. Using old and new media, they will engage in a regular process of designing, drafting, and redrafting stories and relating interesting experiences from their time in Volterra that may be shared with their classmates, colleagues, family, and friends within an electronic portfolio. As managers of their own e-portfolios, students will develop a learning record designed to exceed the limits of the course. Regular assessment of the e-portfolio and its entries may be carried out by a small team of faculty at Windsor and facilitated by the Windsor faculty resident at Volterra. (Note: This course is available only to students participating in the Volterra, Italy, study abroad arts program. Permission of the Instructor is required.) (Prerequisites: 01-150 and 01-151.) (Also offered as 28-285.)

27-290. Introductory Photography: Digital
An applied photography course concentrating on digital imaging processes, including camera operation for high quality digital image capture, colour use, image processing, and printing. The course offers an introduction to the elements of digital photography, concentrating on digital image capture, image processing using Adobe Photoshop and Bridge, colour management, and an introduction to scanning and printing. Various types of digital cameras are discussed. Critiques, presentations and readings assist students to expand their analytical and creative skills. (Lab fees may apply.) (Pre-requisites: 27-105, 27-106, 27-107, 27-108).

27-303. Drawing
Advanced problems in drawing, emphasizing individual directions, concepts, and various media. (Prerequisite: 27-203.) (May be repeated for credit.) (Lab fees may apply.)

27-313. Painting
Development of the concepts and painting skills encountered in 27-213. Exploration of the creative potential, range, and flexibility of non-traditional techniques, forms and media. (Prerequisites: 27-213.) (May be repeated for credit.) (Lab fees may apply.)

27-318. Alabaster sculpture
This course is a complete experience in the art and 2000-year tradition of alabaster sculpture. Students will have a unique opportunity to work with stone valued above others for its decorative qualities. The students will work under the direction of Volterra alabaster masters in a sculpture studio on forming their creative ideas and becoming familiar with the tools. Students will typically start with a clay model; discuss the design and technique with the teacher and move on to carve a block of stone. The students will also visit local quarries, artisan shops and galleries to learn the potential of the material and the energy behind the local tradition. (Note: This course is available only to students participating in the Volterra, Italy study abroad arts program. Course 27-105 is recommended as preparatory course and/or Permission of the Sculpture Area Coordinator is required.)

27-320. Contemporary Italian Culture
This course helps students visiting as study abroad participants in Volterra, Italy, to become a part of the local community, develop a few tools to learn about Italian culture, and gain basic language knowledge to communicate in Italian in everyday situations. Students will learn to negotiate participation in art sites and cultural activities, become engaged in the cultural life of the city and other nearby centres, communicate appropriately in situations such as introducing themselves, exchanging personal information, asking and giving directions and discussing daily routines. The students will explore the socio-cultural context in which the language is used. They learn to communicate in simple tasks requiring a direct exchange of information on familiar topics. The course is a catalyst for cultural immersion during the Volterra program, but it is also a foundation to encourage further systematic studies in culture, social, and language subject areas. (Note: This course is available and highly recommended only to students participating in the Volterra, Italy, study abroad arts program.)

27-326. Printmaking
Continued development of contemporary printmaking practice. Further investigation of process-oriented issue-based image making, with emphasis on student's chosen direction. Students are encouraged to expand their analytical, experimental and creative skills. (May be repeated for credit.) (Prerequisites: one 200-level printmaking course.) (Lab fees may apply.)

27-333. Sculpture
An in-depth study of concepts and processes as they pertain to contemporary sculpture practice. Issues will be addressed through group discussion and practical application. (Prerequisites: 27-233.) (May be repeated for credit.) (Lab fees may apply.)

27-343. Time-Based Art
This course explores time-based media in more complex and demanding projects than 27-243. Projects may include experimental video, animation, video installation, audio projects, documentary and performance art. This studio course encourages the thoughtful engagement of complex ideas through visual and/or audio means within issues in visual culture and contemporary art practices. (Prerequisite: 27-243 or 27-263 or 27-245 or 39-200) (May be repeated for credit.) (Lab fees may apply.)

27-345. Digital Media and Interactivity
This course introduces students to the basic concepts and tools of interactive multimedia as a creative medium in real space. Students will experiment with interactive structures for creative content development using digital images, sound, text, etc. for disk-based delivery environments. The acquisition of the technical knowledge will be grounded within an exploration of aesthetic and social issues. (May be repeated for credit.) (Prerequisite: 27-245.) (Lab fees may apply.)

27-346. Documentary Photography
This course is a concentrated investigation of the historic codification of the

photograph as document and the current implications for this form of representation. Issues of photographic objectivity and truth will be examined in relation to the role of documentary photography as a tool of political and social advocacy. Students will produce a body of photographic work, with learning supported by lectures and critiques. (Lab fees may apply.) (Pre-requisites: 27-253 or 27-290)

27-347. Photography: Sequence and Context
This course is an intensive investigation into photographic representation. The course will concentrate on the properties of individual photographs and the meanings created when they are combined into groups, series and sequences. Photographic books, slide shows, magazine layouts, blogs, exhibitions, and installations are explored as means of developing visual fluency and coherent self-expression. Critical readings and class discussions will enlist a wide range of theoretical approaches. Students will create an independent body of work based on course material. (Lab fees may apply.) (Pre-requisites: 27-253 or 27-290)

27-348. Photography: Concept and Production
An applied exploration of current critical issues in photography. Students will explore, discuss and produce photographic work that addresses the current theme of the course. Themes will vary but may include: Decoding the Portrait, the City and the Land, the Vernacular, the Street and the Studio, Space and Place, Representation and Appropriation, and Gender and Landscapes. Students will produce a body of work and learning will be supported by lectures and critiques. (Lab fees may apply.) (Prerequisites: 27-253 or 27-290)

27-363. Advanced Sonic Art
An in-depth study of techniques for creating advanced sound-based art, including sound synthesis, electroacoustic music composition, sound installation, and soundtracks for film and video. (Pre-requisite: 27-263 or 32-232 or permission of the instructor.) (Also offered as 32-332 Advanced Music Technology.) (May be repeated for credit.) (Lab fees may apply.)

27-365. Independent Studio
Individual work on specific projects under the guidance of an instructor. (Prerequisite: one 300-numbered studio course in the subject desired and consent of instructor.) (May be repeated for credit.) (Lab fees may apply.)

27-371. Art in Public Spaces
This studio practice course investigates concepts and processes by which artists work in public spaces. It considers intersections of ideas and disciplines that humanize the built environment while challenging and invigorating public spaces. Students will research, propose, and develop works of public art for civic squares, sculpture parks, back alleys, neighbourhoods, parking spaces, provincial parks, public beaches, lakes, rivers or other areas. Where possible, projects may also be executed in specific public spaces. Through location-driven research processes, students will uncover the uniqueness of space and place by exploring and exploiting each proposed location. This course is not limited to any particular medium, and students may respond in any medium offered within the School of Creative Arts. (Prerequisite: one “27-” course at the 200-level.)

27-380. Visual Art Internship
Practical work experience in organizations such as art centres, galleries, artists' studios, community organizations, and arts-related professional businesses. (Offered on a Pass/Non-Pass basis.) (Restricted to B.F.A. Visual Arts Majors and to Visual Art Combined Honours students with an average of 75% (B) or better, and with permission of the Visual Arts Internship Coordinator.) (100 hours total, 80 hours working in the community.) Students are signed-in to the course by the Coordinator, rather than registering on-line. May not be repeated for credit.

27-383. Inter-Media Practices - Processes
A studio/seminar course providing the basis for an interwoven art practice in an interdisciplinary context is developed through a critical approach to materials, issues, and art-making. Required readings/research pertinent to current issues are discussed in relation to studio production. Studio production integrating two or more Visual Arts' disciplines is expected. (Prerequisites: 27-203, two 200 level studios, and three 200 or 300 studios.)

27-384. Inter-Media Practices - Topics
A practice-oriented seminar focusing on topics central to the interdisciplinary art practice in contemporary social and cultural contexts. Issues within areas such as history, gender, race and technology are considered within the context of varying perspectives. Students' studio production is challenged within a contemporary

interdisciplinary environment. The students' individual production will be expected to be situated within the larger art and social context. (Prerequisites: 27-203, two 200 level studios, and three 200 or 300 studios.)

27-385. Green Corridor
A cross-disciplinary course that investigates and proposes various strategies for the creation and realization of public environmentally-aware art projects. Course work contributes to the creation of a City of Windsor/University of Windsor Green Corridor. Projects are generated in conjunction with community-based research and involvement with special interest groups. Students will be involved in the research and development of concepts evolving from discussions and participation in series of lecture/seminars. Areas of investigation during the course will include environmental study and impact, the social and political functions of public art in contemporary culture, the public creative process, the importance of public education in the development of community-based projects, marketing of public art and environmental awareness. (Prerequisites: at least Semester 5 and in good standing, or graduate student.) (May be repeated for credit with permission of instructor.)

27-386. Bioart: Contemporary Art and the Life Sciences
This course is a visual art and science crossover lab intended for students from various disciplines to foster interdisciplinary exploration of the intersections between art and the life sciences through hands-on laboratory protocols, critical readings, theoretical writing, and the production of contemporary artwork. No previous experience in the biological sciences is required. (Prerequisites: One 200 level studio) (May be repeated for credit.) (Lab fees may apply.) (Students outside of the School of Visual Arts require permission of the instructor to enrol.)

27-390. Studies in the Visual Arts
Special projects, topics or cross-disciplinary undertakings in the Visual Arts, organized periodically. Specific information on course content will be available from Visual Arts (Prerequisites: consent of instructor.) (May be repeated for credit.) (Lab fees may apply.)

27-480. Studio Practice I
The advanced student is given wide range to work in a chosen medium to synthesize accumulated knowledge and experience with individual critique provided by the instructor. (Prerequisites: 14 studio courses which must include 27-383 or 27-384 plus three 300-level courses in the same or related area.) (double credit weight)

27-481. Studio Practice II
The advanced student is given wide range to work in a chosen medium to synthesize accumulated knowledge and experience with individual critique provided by the instructor. (Prerequisite: 27-480.) (double credit weight)

27-490. Seminar
Investigation of professional practice and contemporary developments in the arts may include group discussion, visits to galleries, projects, lectures, written assignments. (Restricted to students registered in 400-level Studio Practice courses in the B.F.A. program only.) (Lab fees may apply.)

27-491. Critical Issues
Development of an understanding of issues which have been addressed by contemporary artists and critics contextualized in history and artistic practices with an emphasis on individual students' concerns. (Restricted to students registered in 400-level Studio Practice courses or permission of the instructor.) (Lab fees may apply.)

ART HISTORY

Not all courses listed will necessarily be offered each year. Prerequisites for all Art History courses are waived for non-Visual Arts majors. Art History courses are three hours a week unless otherwise indicated.

28-150. Contemporary Visual Culture
A critical investigation of the visual imagery and artifacts of contemporary culture. Drawing upon examples from TV, advertising, cinema, cyber culture, architecture, design and art, students are introduced to such concepts as spectacle, kitsch, simulacrum, hypertext paradigm. (Lab fees may apply.)

28-214. Survey of Art History: Ancient to Medieval
History of art from prehistoric through medieval, with an introduction to

composition, the language of the plastic arts and its relationship to culture. (Students cannot receive credit for both 28-114 and 28-214.)

28-215. Survey of Art History: Renaissance to Modern
History of art from Italian Renaissance to the twentieth century, with emphasis on the influence of social and philosophical ideas. (Students cannot receive credit for both 28-115 and 28-215.)

28-220. The Planned City as a Work of Art
The city as a grand plan has always been both an idea and an ideal in the West. This course will trace the development of the city envisioned as a single, unified construct, often with a specific purpose in mind. From the ancient world of Athens and Rome, to Medieval Siena and Renaissance Florence through to the 19th century in Europe and North America, these great urban visions continue to influence how we live. (Prerequisites: 28-214 and 28-215.)

28-245. Modern Art
This course will introduce students to the development of modern art from the late nineteenth century to the middle of the twentieth century. The course will cover the relationship between the artistic movements of the early twentieth century and the cultural and political ideas that informed them. This course will trace the rise of abstraction in the early part of the twentieth century as well as subsequent developments in Dada and Surrealism. (Prerequisite: 28-150 and 28-215 for majors; or semester four standing for non-majors)

28-250. Stories of the City
This course examines how cities are imagined, dreamed, planned, described, and remembered. Students explore urban cultures, legends, scenes, and structures to discern how the spaces and rhythms of city life are expressed through its literature, visual arts, films, sounds, architectures and other media. While the course addresses urban disasters and achievements, it also investigates the everydayness of urban existence. Classes respond with theoretical, creative and community-based research projects that foster conversation and involvement with citizens. (Prerequisites: One of: 01-28-150, 01-32-126, 02-40-101, or permission from the instructor.)

28-285. Learning by Living in an International Urban Setting
This course develops the capability to describe and reflect upon the everyday rhythms and challenges of learning in a new culture and urban environment and finding expressive ways to communicate the experiences and challenges of learning to others. As an exploration of living in an Italian city, students will examine films, literature, music, theatre, or other expressive forms that reflect Italian and European urban life. Students will write weekly blogs about their own experiences, perceptions and understanding of Italian culture and living abroad. Using old and new media, they will engage in a regular process of designing, drafting, and redrafting stories and relating interesting experiences from their time in Volterra that may be shared with their classmates, colleagues, family, and friends within an electronic portfolio. As managers of their own e-portfolios, students will develop a learning record designed to exceed the limits of the course. Regular assessment of the e-portfolio and its entries may be carried out by a small team of faculty at Windsor and facilitated by the Windsor faculty resident at Volterra. (Note: This course is available only to students participating in the Volterra, Italy, study abroad arts program. Permission of the Instructor is required.) (Prerequisites: 01-150 and 01-151.) (Also offered as 27-285.)

28-301. Northern Renaissance Art
The art of Northern Europe during the fifteenth and sixteenth centuries with particular emphasis upon the Franco-Flemish and German painting traditions and the beginnings of Graphic Art. (Prerequisites for Visual Art majors: 28-214 and 28-215.)

28-307. Renaissance Art I
The Renaissance in Italy during the fifteenth century with special attention given to the architecture, sculpture, and painting of Florence. (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

28-308. Renaissance Art II
The art of the Renaissance in Italy with a major consideration of the architecture, sculpture, and painting produced in Rome and Venice during the sixteenth century. (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

28-320. Contemporary Italian Culture
This course helps students visiting as study abroad participants in Volterra, Italy,

to become a part of the local community, develop a few tools to learn about Italian culture, and gain basic language knowledge to communicate in Italian in everyday situations. Students will learn to negotiate participation in art sites and cultural activities, become engaged in the cultural life of the city and other nearby centres, communicate appropriately in situations such as introducing themselves, exchanging personal information, asking and giving directions and discussing daily routines. The students will explore the socio-cultural context in which the language is used. They learn to communicate in simple tasks requiring a direct exchange of information on familiar topics. The course is a catalyst for cultural immersion during the Volterra program, but it is also a foundation to encourage further systematic studies in culture, social, and language subject areas. (Note: This course is available and highly recommended only to students participating in the Volterra, Italy, study abroad arts program.)

28-331. Nineteenth-Century European Art
An analysis of the major movements in European painting during the nineteenth century including Neo-Classicism, Romanticism, Realism, Impressionism, and Post-Impressionism. (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

28-336. Early Medieval Art
An examination of the painting, sculpture, and architecture of Europe including the Early Christian, Byzantine, Hiberno-Saxon, Carolingian, and Ottonian periods. (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

28-337. Later Medieval Art
An examination of the evolution of architecture and sculpture in Europe during the Romanesque and Gothic periods. (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

28-338. Islamic Art
An examination of important trends in the artistic development of the Muslim era, including the Umayyad, Tulunid, Fatamid, Seljuk, Mongol, Nasrid, Mamluk, Ottoman, Timurid, Safvid, and Mughal dynasties. (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

28-339. Japanese Art
The architecture, sculpture, and painting of Japan and the relationship of Japanese culture to continental artistic developments. (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

28-340. Art of India
A general survey of Indian architecture, sculpture, and painting with particular emphasis on the development of the Buddha Image. (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

28-341. Art of China
An examination on the architecture, sculpture, and painting of China from the Shang through the Ching dynasties. (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

28-342. The Development of American Art
A study of the art and architecture created in the United States from Colonial times to the twentieth century. (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

28-345. Art of the Twentieth Century-Post-1940
An examination of the sources, movements, and major figures contributing to twentieth century art in Europe and North America from 1940 on. (Prerequisites for Visual Arts majors: 28-150, 28-214 and 28-215.)

28-352: Techniques and Technologies of Urban Life
This course examines the relationship between technologies, the built environments of cities, and the ways in which we experience, remember, connect and interact in urban spaces, places, and times. Drawing on cultural theories and creative practices, students develop conceptual tools for the analysis of different technologies, media, cultural artifacts, spaces, and social practices, as well as creative research methodologies that use old and new technologies to question and document urban and suburban life. (Prerequisites: One of: 28-150, 28-214, 28-215, 32-126, 40-101, or permission from the instructor.)

28-355. Curating as Cultural Practice
This course will examine the expanding variety of models of curatorial practice in an interdisciplinary context. Students will acquire first hand experience in the conceptualization, proposal and realization of social and cultural events as

creative practice that engages research and conceptual knowledge in new ways. It may also be understood as a form of social practice that is invested in public interaction. Class projects will be designed to frame contemporary issues and to communicate with new audiences. (Pre-requisites: For BFA or BA Visual Arts/Art History students: 28-150, 28-214, 28-215. For majors in FAHSS: 01/02-110 or 01/02-200). (May be repeated twice for credit.)

28-360. History of Photography
This course addresses the history of photography from a social and aesthetic perspective. With the invention of photography in the nineteenth century, debates about subjectivity, truth, memory and difference were radically re-framed. This course follows the emergence of photography in 1839 through its development in the twentieth century, exploring its documentary and aesthetic roles in relation to specific socio-historical contexts. The significance of technological innovations to image creation will also be addressed.

28-362. Contemporary Issues in Photography
This course will provide an examination of the theoretical debates and key writings on photography in the modern and contemporary contexts. Critical areas to be discussed include photographic realism, documentary and narrative forms, digital reconfiguration, intermediality, gender and identity, space and place. The role of the photograph will be explored in relation to conditions in contemporary art and society to provide a broader context for interrogating photographic image-making.

28-370. Media Art Histories
This course surveys artistic practices and theoretical models that have emerged from the intersecting histories of art, media, science, and technology. These interwoven histories are explored through case studies of visual artists, filmmakers, musicians, and architects working between disciplinary and technological boundaries. Students will investigate ways in which these artists and practitioners have developed strategies across time to promote, test, evade, and challenge the social roles and forms of emerging media and technology. (Prerequisites: 28-150 or permission from the instructor.)

28-391. Contemporary Architecture
A survey of the roots of contemporary architectural theory through an examination of representative structures since the Industrial Revolution. Students will be introduced to those individuals who have played a central role in the development of architectural thought in North America. (Prerequisites for Visual Arts majors: 28-214 and 28-215.) (3 lecture hours a week.)

28-400. Directed Individual Studies
The Independent Study course in Media Art Histories and Visual Culture is reserved for exceptional students to pursue a research paper under the supervision of a full-time faculty member in the Media Art Histories and Visual Culture area. This course requires that students formulate new research questions that stem from previous course work and to write a substantial essay (minimum 15 - 20 pages) that focuses on an historical or theoretical issue in art, architecture, the built environment, and visual or sonic media. Students must apply to the MAH/VC area coordinator at least two months prior to the beginning of semester to be considered. Applications will be considered on the basis of the ability of senior course offerings and the availability of faculty members in the MAH/VC area. All applicants must have demonstrated superior academic ability in similar courses at the 300 level and above. An 80% average in Media Art Histories and Visual Culture courses will be required for this course. Prerequisites 28-150, 28-214, 28-215 and a 300 numbered course in the subject area. This course cannot be repeated for credit.

28-450. Border Culture
This course addresses the role of borders in contemporary global culture as both physical boundaries and affective conditions. In the context of the Windsor-Detroit border, students from the University of Windsor will exchange viewpoints based upon the experience of living in a border culture. Seminars and field trips will take up the topic of borders from a number of perspectives and contexts. Students will look at historical and contemporary ideas about borders that have been articulated in various disciplines: from political theory and cultural geography, to urban planning, art, literature, architectural and spatial theory. (Open to majors and non-majors.) (Prerequisites: 28-150 and semester 4 standing.) (Also offered as 40-450)

28-452: Urban Ecologies
This course examines cities as a complex field of cultural, social, linguistic, technological, and architectural objects, activities, relationships, and experiences.

Students investigate different ecological models of city life to contemplate tensions between the active and static, material and immaterial, porous and impermeable character of cities. In classroom seminars and research practice, students discuss and debate a range of theoretical models and develop creative strategies to probe the natural, physical, artistic, cultural, acoustic, and medial ecologies of cities. (Prerequisites: 28-250 or 28-352, or permission from the instructor.)

28-453. History of Detroit Architecture
Since its founding in 1701, Detroit has reflected all major movements in North American architecture. This course will examine the evolution of architectural styles in Detroit beginning with the pre-American French Colonial, moving through the many revival styles of the 19th century, Beaux Arts, Art Deco and ending with Post Modernism and recent additions to the city's skyline. Course includes both lectures and on-site architectural visits. (Prerequisites: 28-214 and 28-215.)

28-456. Proseminar
A Proseminar course based on group encounters with particular studies in the History of Art, which will be considered by means of readings, discussions, papers, and museum trips. May be repeated for credit with permission. For specific topics consult a program advisor in Visual Arts. (Prerequisites: 28-150, 28-214, 28-215, and consent of the instructor.)

VISUAL ART AND THE BUILT ENVIRONMENT (VABE): COURSES

36-110. Architectural Design I
An introduction to the fundamental skills and critical concepts of visual perception and production common to all areas of 2 dimensional image-making. Basic principles of composition and design, light and pigment-based colour theory, as these apply to painting, photo-based processes, and print production. Their use and application will be will be explored within the contemporary art context. Class projects may involve interdisciplinarity between these media. Studio assignments are combined with related critical theory, historical practice and current strategies. The lab is intended to introduce students to design concept of form, space, composition, in two and three dimension, and how they relate to human experiences. Students are introduced to the principles of design and the design process as a foundation for architectural design. (6 lecture hours and 6 laboratory hours per week.) (6.0 credit course) (Credit will not be granted for 27-106 if taken subsequently to 36-110.) (Restricted to students in the Visual Arts and the Built Environment program.)

36-116/ARCH1160. Computer Graphics
An introduction to computer graphics. This course utilizes Autodesk's AutoCAD and Revit on IBM compatible hardware. The course stresses three dimensional digital modeling as a primary method of communication and design and includes elements of computer visualization techniques. Students acquire hands-on experience through a series of laboratory exercises and individual projects. (Taken at the University of Detroit Mercy.)

36-119/ARCH1190. Introduction to Architecture I
An Introduction to Architecture is offered to first year VABE students to create awareness of the profession of architecture. The course looks at the history of the profession; how architecture is practiced; how the profession is changing; current issues with the architectural profession; and ethical concerns facing a practitioner today. The course gives students a broad based back-ground into architecture before they have an opportunity to be engaged in practice. (Taken at the University of Detroit Mercy.) (Open to VABE students only.)

36-120. Architectural Design II
Students are introduced to media, techniques, vocabulary, and concepts of drawing, as well as principles directly related to the design of buildings and spatial experience. Students will be exposed to complex drawing situations with an emphasis on a variety of materials. During the lab there will be several short term, intense projects that focus on architectural design and will include the study of exterior spaces, space programming, materiality, and constructability. (Prerequisites: 27-107, 36-110.) (6.0 credit course) (Lab fees may apply.)

36-129/ARCH1290. Introduction to Architecture II
This is a continuation of Introduction to Architecture I offered to first year VABE students to create awareness of the profession of architecture. The course looks at the history of the profession; how architecture is practiced; how the profession is changing; current issues with the architectural profession; and ethical concerns facing a practitioner today. The course gives students a broad based back-ground into architecture before they have an opportunity to be engaged in practice.

(Taken at the University of Detroit Mercy.) (Open to VABE students only)

36-213. Principles of Structural Behaviour
An analysis of known structural systems in terms of spatial behavior in non-mathematical terms. The basic approaches to structure, proper scale of use and the effects of various materials, geometry and construction techniques are integrated into the course content. Illustrated lectures covering buildings from ancient to modern are used to demonstrate structural principles. (Open to VABE students only.)

36-216/ARCH2160. 3D Computer Graphics
This course in computer aided design uses primarily Autodesk 3D Studio software. The emphasis is on visualization and design in three dimensions. Students learn how to assemble complex three-dimensional, digital architectural landscapes equipped with real-life attributes of light, building materials, etc. These objects are rendered and animated to facilitate the needs of the design process as well as complex graphic presentations. Additional post-processing and graphic software is introduced. (Taken at the University of Detroit Mercy.)

36-230/ARCH1300. Architectural Design III
Design III is intended to transfer ideas explored in first year into their architectural applications while introducing students to the design of simple buildings and spaces as a creative integration of multiple systems i.e. concept, site, function, structure, mechanical systems, accessibility, materials and codes. The overall intent is to give students the opportunity to understand and explore in more detail how various systems inform, integrate and coordinate the design of architectural form and space. This term focuses on the issues of the integration of form and structure and the issue of materiality/constructability. (Prerequisites: 36-120) (Taken at the University of Detroit Mercy.)

36-233/ARCH2330. Structures I
Analysis of structures. This course teaches the mathematical calculation of structures through lectures, and individual problem assignments. It focuses on resolution of forces; reaction; forces in frames and trusses; and forces in frames with beams. Also examined are characteristics of structural materials and structural components: shear and bending movements, flexural and shear stresses, combined stresses, principal stresses, combined bending and axial loads and stresses, deflection, continuity in structures. Light weight wood framing is presented as is wood as a structural material. (Prerequisites: 36-213)) (Taken at the University of Detroit Mercy.)

36-240/ARCH1400. Architectural Design IV
Design IV is a continuation of studies begun in Design III. It is intended to further develop the student's ability to design buildings and building complexes within the context of integrated multiple systems. The issues of focus for this term also include sustainability, environmental systems and the design of a totally integrated project. (Prerequisites: 36-230) (Taken at the University of Detroit Mercy.)

36-243/ARCH2430. Structures II
This second course in structures focuses on principles of design of simple structures. Primarily studied are the design of beams, columns, trusses, built-up components and foundations in standard structural materials, steel and concrete. Related building construction techniques as well as lateral and seismic loading are also presented. (Prerequisites: 36-233) (Taken at the University of Detroit Mercy.)

36-310/ARCH2100. Architectural Design 5
This is the first of a series of studio courses that combines students from the third and fourth years into a common studio to explore a particular project type and theme. These projects change from term to term. Project types include: housing, civic buildings, urban design, retail, office, health care and manufacturing buildings, etc. Themes include: community design, architectural competitions, historic preservation, electronic design, sustainable design, representation, design-build, and architectural theory. It is the intent of these studios to broaden and deepen the student’s design skills and experiences while preparing them for the Master’s Studios. (Prerequisites: 36-240) (Taken at the University of Detroit Mercy.)

36-320/ARCH2200. Architectural Design 6
Design VI is a continuation of studies begun in Design V and is the second part of the combined third and fourth year common senior studio series. The projects change from term to term and students explore different project types and themes. Project types include: housing, civic buildings, urban design, retail, office, health care and manufacturing buildings, etc. Themes include: community design,

architectural competitions, historic preservation, electronic design, sustainable design, representation, design-build, and architectural theory. It is the intent of these studios to broaden and deepen the student's design skills and experiences while preparing them for the Master's Studios. (Prerequisites: 36-310) (Taken at the University of Detroit Mercy.)

36-300/CEC3000. Co-op Training Presentation
This course prepares students for the co-op experience. Topics covered include the Career Development Model and the Cooperative Education Model including job search & job readiness, learning objectives, resume writing, and practice interviews. This course offers students the opportunity to learn about the profession of architecture and its practice. (Open to 3rd year VABE students only) (Taken at the University of Detroit Mercy.)

CINEMA ARTS: COURSES

39-100. Cinema I
An introduction to the tools and technologies of making short films, this course will focus on the artistic and practical aspects of audiovisual media production. In this course students will be guided through the production processes in filmmaking and will work together to pitch, write, shoot, edit, exhibit and discuss their own work. (2 lecture hours, 1 lab hour a week.)

39-110. The Fundamentals of Cinema
This course is an introduction to the practice and the history of film with a focus on the dominant artistic and commercial forms, theoretical analyses, genre classifications and evolving technologies that have influenced and transformed its practices and meanings. The course will simultaneously consider the socio-political, artistic and mechanical/media contexts of the medium as they have changed through time. (2 lecture hours, 1 lab hours per week.)

39-200. Cinema II
This course will explore the creative, theoretical and practical aspects of filmmaking. Students will expand their knowledge of artistic, practical and analytical approaches to screenwriting, directing, cinematography and editing through readings, screenings and hands-on work. (Prerequisites: 39-100 or permission of the instructor). (2 lecture hours, 1 lab hours a week).

39-300. Cinema III
This course continues the creative approach to and technical practice of independent film production initiated in 39-200. Students will expand their experience and knowledge of theoretical and practical filmmaking in both the field and film studios. (Prerequisite: 39-200 or permission of the instructor). (2 Lecture hours, 1 Lab hour).

39-310. Cinematography
This course focuses on cinematic visuals using various cameras as tools. Students will explore the theory and craft of motion picture cinematography. This course will provide students with the opportunity to shoot several film assignments, engage in critical discussion, conduct peer reviews of each other's work, and screen their productions. (Prerequisite: 39-200 or permission of the instructor.)

39-320. Screenwriting
This course is an exploration of the theory and craft of screenwriting that focuses on writing for short films. Students will write scripts that will be workshopped and pitched throughout the semester in order to develop and refine writing and storytelling skills. Writing assignments, discussion, peer review, pitch presentations and analysis of texts via screenings and readings will inform the students' work and understanding of the form. (Pre-requisites: 39-300 or permission of the instructor.) (3 lecture hours)

39-330. Motion Picture Technologies
An in-depth study of techniques for creating 3D film production, special effects, aerial cinematography and robotic cinema imagery. Students will expand their creative visual approach and technical practice in field and film studios. (Prerequisite: 39-200 or permission of the instructor). (2 Lecture hours, 1 lab hour a week).

39-400. Cinema IV
This course continues the creative approach and technical practice of independent film production initiated in 39-300. Students will expand their experience and knowledge of theoretical and practical filmmaking in the field and studio.

(Prerequisites: 39-300 or permission of the instructor). (2 Lecture hours, 1 Film Production tutorial hour).

39-420. Advanced Screenwriting
A continuation of the study and practice of screenwriting for short film and video projects, students in this course focus on narrative craft and theory while workshopping scripts toward a final pitch presentation. The goal of this course is to expand the students' writing and storytelling skills through writing assignments, discussion, peer review, pitch presentations, creative exercises and in-depth analysis of texts via screenings and readings. (Pre-requisite: 39-320 or permission of the instructor.) (3 lecture hours).

39-410. Cinema and Social Practices
This course will explore issues and concepts that apply to documentary film. Students will analyze the form and create work within a context of artistic experimentation and theoretical consideration. Students will further develop their abilities to reflect upon, critique, discuss and express the creative strategies and theoretical meanings that motivate their own work. A special emphasis of the class will be on creating short videos on topics of local interest that engage and impact local communities, particularly on campus. (3 lecture hours per week.)

39-490. Advanced Cinema V
This class continues the creative approach to and technical practice of independent film production initiated in 39-400. Students will expand their experience and knowledge of theoretical and practical filmmaking in the field, in studio and throughout post-production. (Prerequisites: 39-400 or permission of the instructor). (2 Lecture hours, 1 Film Production tutorial hour)

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WOMEN'S AND GENDER STUDIES: COURSES

53-100. Women in Canadian Society
This course illustrates and account for the position of women in Canadian society. We explore how gender identities are informed by the process of social construction which privileges some women while disadvantaging others.

53-106. Women and Religion
A comparative, feminist-critical exploration of the status of women and women's religious experience in selected examples of traditional (*e.g.,* Judaism, Christianity, Islam, Hinduism, Buddhism) and non-traditional (*e.g.,* Goddess religions, Wicca, Feminism) religions, ancient and modern. (Can be taken for either Social Science or Arts credit.)

53-120. Gal Pals: Women and Friendship
This course examines a diverse range of women's friendships. Through discussion, reading, and films we will explore topics such as the meaning of friendship for women, how women's friendships have been portrayed in literature and film, the link between friendship and social activism for women, and the political meanings of women's friendship in cultures resistant to woman-centered consciousness. (Can be taken for Social Science or Arts credit.)

53-130. Imagining Women
This course examines a broad cross-section of historical and contemporary representations of western women in popular culture, and visual media – photographs, film and video, the fine arts, and advertising. The student will be introduced to feminist and gender-related theories of representation. (Can be taken for either Social Science or Arts credit.)

53-200. History of Women's Movements in North America
An exploration of the collective action of women in the past and present in North America. Areas of study may include women's involvement with the temperance, civil rights, suffrage, trade union, environmental, reproductive rights, and women's liberation movements. (Also offered as History 43-251.)

53-201. Women, Sexuality and Social Justice
This course examines the personal and cultural meanings of women's sexual identities in Canada today. Students consider how these identities are created and experienced in conjunction with other identities such as race/ethnicity, social class, and (dis)ability and how women challenge the personal, social, political, and economic inequities that continue to be based on these identities. Students are encouraged to analyze how their beliefs and behaviours are shaped by heterosexual privilege.(Also offered as Sociology 48-251.) (Prerequisites: 53-100.)

53-202. Women, Race, and Social Justice
This course examines the personal and cultural meanings of women's racial and ethnic identities in Canada today. Students consider how these identities are created and experienced in conjunction with other identities such as sexuality, social class, and (dis)ability and how women challenge the personal, social, political, and economic inequities that continue to be based on these identities. Students are encouraged to analyze how their beliefs and behaviours are shaped by white privilege. (Prerequisite: 53-100 or permission of the instructor.)

53-206. Work and Equality
The course explores how work (both paid and unpaid) is distributed, valued and rewarded with special attention to issues of gender, racialization, ethnicity, sexuality, age and physical appearance. The course will also cover efforts to create greater equality in the valuation of work and the distribution of responsibility through public policy, law, collective bargaining, and advocacy. (Prerequisites: 54-105 or 53-100, or 48-101 <u>and</u> 48-102) (Also offered as Labour Studies 54-206)

53-211. Women and Politics
An introduction to the principal themes in the study of women in Canadian politics. Topics may include: feminist theory, women in Canadian political institutions, the status of women in the Canadian economy, and gender equality rights in the Charter. Also offered as Political Science 45-211.

53-220. Women's Bodies, Women's Health
This course examines and critiques commonly cited biological evidence in support

of sex differences and male superiority, including research on anatomy, genetics, hormones, and differential brain functioning. Students explore the social, cultural, and political meanings of the female body and consider how these understandings influence medical and non-medical definitions of “health” for women. Students investigate how sexism, classism, racism, ageism, and homophobia shape how individuals think about and value different female bodies. (Prerequisite: One Women's Studies (53-) course and at least semester 3 standing.) (Can be taken for either Science or Social Science credit.)

53-230. Gender and Moral Choice
This course examines how gender affects personal and public definitions of moral problems and their resolution. Issues such as reproductive choices, childrearing, poverty, and war will be used to explore these ideas. (Can be taken for either Social Science or Arts credit.) (Prerequisite: Semester 3 or above standing and one Women's Studies course or consent of the instructor.)

53-236. Feminist Philosophies
An examination of key philosophical themes in feminism and philosophical debates among feminists. The themes and subjects of debate addressed may include sexism and oppression, feminist identity; theories the political significance of language, personal appearance, and pornography; feminist ethics; and feminist theories of knowledge. (Prerequisite: 34-110 or 34-112 or semester 3 or above standing, or consent of the instructor. Can be taken as an Arts credit.) (Also offered as Philosophy 34-236).

53-250. Women, Movement, and Performance
This course explores how women come to know themselves and others through their bodies, gender and racial stereotypes, body image and body language, women's use of space, the gendered construction of sport, and movement as a cultural message. (Prerequisite: one Women’s Studies course. Can be taken for either Social Science or Arts credit.)

53-260. Women and Globalization
This course introduces students to gender-sensitive analysis of the role of women in the global economy. Course materials cover the place of women in the international division of labour, the role of women in export-oriented industries in the "Third World," and women as "homeworkers" in the First and Third World. Students will utilize relevant empirical material to develop critical thinking and an understanding of gender inequalities in the "development process." (Prerequisites: at least Semester 3 standing.)(Also offered as Labour Studies 54-260.)

53-270. Nags, Housewives, and Sluts: Language and Women's Place
This course makes visible the politics hidden in the English language. Students learn how to identify and challenge aspects of language structure and use which perpetuate power and privilege. Topics include naming, slang, metaphor, grammar rules, and humour. (Prerequisite: Semester 3 standing or above and one Women's Studies course or consent of the instructor.) (Can be taken for either Social Science or Arts credit.)

53-275. Boys to Men: A critical exploration of masculinities
This course uses personal narrative and popular culture to examine the lived realities of boys and men. The course explores dominant models of masculinity in order to challenge gender stereotypes that often flatten and narrow the lives of boys and men, and also the lives of women and girls. (Semester 4 standing or above.)

53-299. Special Topics in Women's Studies
Special Topics courses will be offered occasionally to meet a demonstrated academic need that cannot be satisfied by regular course offerings. (Prerequisites: will vary depending on the subject.)

53-300. Women, Knowledge, and Reality
An exploration of feminist theories about knowledge and reality that inform and are informed by scholarship in Women's Studies. Students examine how gender might affect identity, reasoning, objectivity, and evidence, and in turn, how such variations might affect feminist political practices. (Prerequisites: Two courses at the 200-level or above from Women's Studies and/or Philosophy and at least semester 5 standing.) (Also offered as Philosophy 34-359.)
(Can be taken for Arts credit.)

53-301. Frameworks for Feminist Research
An exploration of the diverse approaches to feminist research in a variety of fields. Students will examine the core questions and approaches that various disciplines

bring to the study of women. (Prerequisites: Two courses at the 200-level or above from Women's Studies or consent of the instructor.)

53-305. Feminist Theories
This course traces the evolution of contemporary feminist theories, the connection between theory and practice, and illustrates the significance of theory-driven practice on women's lives. (Prerequisites: two Women's Studies (53-) courses at the 200-level or above and at least semester 5 standing.)

53-310. Women and the Law
This course examines the relationship between gender inequality and the legal system. Topics include abortion, marriage, divorce, custody, equal pay, sexual harassment, rape, pornography, and prostitution. Students are introduced to basic legal research tools, such as statutes, regulations, cases, and legal literature. (Prerequisites: two Women's Studies courses.)

53-320. Women, Power, and Environments
This course focuses on environmental issues as they affect women across cultures. It provides a feminist critical analysis of the power relations in modern societies that cause environmental degradation and examines the theories, policies, and institutions that contribute to unsustainable practices. Emphasis is placed on the women-nature debate within various environmental social movements and the historical role women have played as activists. (Also offered as Sociology 48-353.) (Prerequisite: Semester 3 or above standing and one course at the 200-level or above from Women's Studies or Sociology.)

53-324. Love, Honour, and Obey: Marriage and Gender
Romantic heterosexual love shapes contemporary notions of marriage for both straight and gay women. But marriage is about much more than love. It shapes women's lives and organizes relations between women and men. This course examines the interpersonal, economic, social, cultural, and legal aspects of marriage past and present, primarily in North America. (Pre-requisite: One Women's Studies course or 43-251 or permission of the instructor.)

53-330. Victims, Survivors, and Warriors: Violence in the Lives of Women and Girls
An interdisciplinary exploration of male violence against women and girls locally and globally. The course will explore the power of language to shape our understanding of issues, the many forms of subtle and explicit violence, the impact of violence on the individual and the status of women, and the creative resistance of women and girls, among other issues. (Prerequisites: two Women's Studies courses and at least semester 4 standing.)

53-335. Theatre from the Twentieth Century to the Present Day
Critical approaches to major theatrical movements and experiments in theatre during the twentieth and twenty-first centuries. (Also offered as Dramatic Art 24-330.) (Open to non-Dramatic Art majors.) (Can be taken for Arts credit.)

53-340. Women, War and Peace
This course examines the various and distinct ways in which women experience war and peace, in both historical and contemporary contexts. Topics include home fronts during wartime in both combat and non-combat zones, women's peace activism, displacement, war crimes against women, women in combat, and media coverage of women and war/peace across the 20th and 21st centuries. (Also offered as History 43-340.) (Prerequisite: one 200-level Women's Studies or History course or 45-260 or consent of the instructor.)

53-345: Tough Chicks: Representations of Women's Strength and Anger in Popular Culture and Society
This course examines popular interest in "tough chicks.". Students investigate the social construction of women's and girls' anger and aggression in fiction, popular media, and real life. and how these understandings are rooted in sexist, racist, homophobic, and other oppressive discourses. Students are encouraged to examine how their own lives and the lives of other women are impacted by these understandings. This course can be used for either Arts of Social Science credit. (Prerequisites: 53-100 and one 200-level Women's Studies (53-) course or consent of the instructor)

53-347. Social Work and Violence
Examines aspects of violence in society, particularly against marginalized groups. The primary focus is on generalist social work intervention related to violence. (Open to senior students. Required course for Social Work/Women's Studies students; elective for BSW students. Pre-requisite: One Women's Studies (53-)

course or permission of the instructor. (Also offered as 47-347.)

53-350. Special Topics
The content will vary to reflect student need and faculty expertise and may be offered as a cross-listed course with other programs. (Prerequisite: at least semester 4 standing. Additional prerequisites may apply depending on subject.) (May be repeated for credit if content changes.)

53-351. Practical Strategies for Social Change: Intervening to Prevent Sexual Assault
This course provides male and female students with an introduction to sexual violence as a social problem. The course addresses how this social problem manifests, why it matters, how it persists, and finally, how it can be changed. The importance of personal and community responsibility for social change is emphasized. This course also provides students with the background knowledge that is needed to successfully teach sexual assault prevention education sessions for fellow students, using the *Bringing in the Bystander® In Person Prevention* workshop. Selected students will deliver the workshop by taking Practicum in Social Change (02-450/46-450/47-450/48-451/53-450) the following semester. Restricted to students who have attained a cumulative GPA of 66% or higher at the time of application. (Prerequisite: Semester 4 standing or above and permission of the instructor by online application at uwindsor.ca/bystander.) (Also offered as 02-350, 46-350, 47-350, and 48-350.)

53-354. Gender, Space, and Time
An examination of sociological and anthropological approaches to the study of space-time relations within the field of gender studies, including a focus on the development of gendered environments and cultural practices. (Also offered as Sociology 48-354.) (Prerequisites: 48-214 or 53-100 and semester 5 or higher standing.) (Credit may not be obtained for both 48-354 and 49-354).

53-355. Feminist Social Work Practice
This course prepares students to apply the principles, processes, and techniques of feminist social work practice. Required course for Social Work/Women's Studies students; elective for BSW students (Prerequisites:(47-336, 47-337 plus three (53-xxx) Women Studies courses or, consent of instructor.) (Also offered as 47-355)

53-370. Madonnas, Monsters, and Machines: Representations of Motherhood
This course examines representations of mothers and motherhood in literature, arts, and popular culture, and the effects of these representations on women's lives. Topics may include constructs of "good" and "bad" mothers, diverse pathways to motherhood, availability and use of reproductive technologies, and feminist activism around mothering. (Prerequisite: Semester 4 standing or above and two Women's Studies courses.)

53-390. Feminisms in the 21st Century
This course investigates the meaning and importance of contemporary feminisms through literature, zines, websites, and "manifestos" written by, for, and about young women. Specific topics of interest are young women's activism with respect to the environment, globalization, and the media, as well as their efforts to confront racism, sexism, and classism. (Prerequisites: two Women's Studies courses and at least semester 3 standing.)

53-400. Exploration of Feminist Voice
Students apply theoretical learning in Women's Studies to individual lived experiences and actions. Through writing and other modes of representation, they communicate their feminist ideas to target audiences. (Prerequisites: 53-300 (or 53-305) and 53-301 or consent of the instructor.)

53-410. Women in Protest
This course examines women at the forefront of protest in historical and contemporary contexts. It analyzes gendered constructs of protest and social and political change. Students will study the role of women in protest movements such as suffrage, reproductive rights, anti-racism, labour rights, environmental justice, anti-globalization, and nationalist and religious movements. Case studies are explored in detail, with particular emphasis on primary-source material from women activists themselves. These studies are complemented by an examination of feminist, social movement, and protest theories. (Prerequisite: 53-200 or 43-251 and one 300-level Women's Studies course or consent of the instructor.)

53-450. Practicum in Social Change
Supervised practicum in a university setting. Students consolidate and enhance

their knowledge of sexual assault and bystander intervention. Students co-facilitate the *Bringing in the Bystander® In Person Prevention* program for one or more small groups of students on campus. The practicum experience equips students to deliver educational content on sensitive issues. (Prerequisite: 02-350/46-350/47-350/48-350/53-351 and permission of the instructor.) (Also offered as 02-02-450, 46-450, 47-450, and 48-451.)

53-463. History of Gender and Sexuality
This course explores major themes in the history of gender and sexuality. These may include reproduction, contraception, and abortion; gender, race, and power; sexuality and the state; heterosexual relations and marriage; gay, lesbian, and transgender identities. Time period and geographical region will vary with the instructor.)(Prerequisite: Semester 5 or above standing and one of 43-249, 43-250, or 43-251/53-200 or permission of the instructor.)(Also offered as History 43-463.)

53-490. Directed Reading in Women's and Gender Studies
An independent research project that explores and applies advanced feminist theory. Applications must include: research question, preliminary reading list, and writing sample. Students must be prepared to present their research to an audience. (Prerequisites: Minimum grade of 80% in 02-53-300/ 01-34-359 or 02-53-305 and 02-53-301 and minimum cumulative average of 75%.) (This course may be repeated for credit if topics are different.)
Students must apply at uwindsor.ca/womensstudies/DirectedReading

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COMPUTER SCIENCE

PROGRAM AND CO-OP REGULATIONS

ENGLISH PROFICIENCY

It is highly recommended that students take English 26-100 (Composition) as students in Computer Science should develop good oral and written communications skills, besides technical proficiency in the basic science.

SELECTION OF COURSES

In selecting courses to meet the requirements of the programs outlined below, the following general regulations also must be observed:

1) A student registering in a course without having successfully completed the prerequisite course(s) will be required to drop that course unless the consent of the Director of Computer Science (or her/his designate) is obtained.

2) If two or more courses cover essentially the same material, only one may be taken for credit.

3) The prior approval of the Director of Computer Science (or her/his designate) must be obtained in order to substitute any courses for required ones.

4) Statistics courses other than those specifically listed as being required for the degree, or ones for which the required statistics courses are themselves prerequisites, may not be taken for credit.

5) In general, Computer Science courses offered in other areas may not be taken for credit. 60-104, 60-106, 60-205, 60-207, 60-270, 60-305, and 60-336 may not be used to satisfy the major requirements of any degree program in Computer Science, or in joint programs with Computer Science, unless permission is obtained from the Director of Computer Science (or her/his designate).

CO-OPERATIVE EDUCATION

The Co-operative Education Program is available for the following degrees:
Bachelor of Computer Science (Honours) Co-op
Bachelor of Science (Honours Computer Information Systems) Co-op
Bachelor of Science (Honours Computer Science with Software Engineering Specialization) Co-op

INTRODUCTION
The Co-operative Education Program offers students the opportunity to combine their classroom experiences with related work experiences. Students who apply and are accepted into the Co-operative Education Program must successfully complete at least three paid work experiences interspersed throughout the four-year Honours program. The experience gained while participating in these structured and supervised work placements is viewed as an integral component of the student's educational program.

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

ACADEMIC REQUIREMENTS
Computer Science Co-op students must maintain full-time academic status and satisfy the following:
(a) Must maintain a minimum average of 60%, and
(b) Must maintain a minimum major average of 65%,
(c) Must not have more than one grade below 50% on their transcript, and;
(d) Must maintain a minimum major average of 65% during the one semester probation period.

GENERAL INFORMATION

Withdrawal from the co-op program will be granted on an exception basis only as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the 1st Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

SEQUENCE OF WORK AND STUDY TERMS

Year of Study	*Fall Semester*	*Winter Semester*	*Summer Semester*
Year 1	Study	Study	Off
Year 2	Study	Study	Work
Year 3	Study	Work	Study
Year 4	Work	Study	Work
Year 5	Study		

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SOCIAL WORK PROGRAM REGULATIONS AND ADMISSION REQUIREMENTS

Honours Bachelor of Social Work

Years I and 2: Admission to the pre-professional program is governed by the general requirements of the University. A minimum of twenty courses (including four Social Work courses, 47-117, 47-118, 47-204, and 47-210. a statistics course, two Science courses, and thirteen courses from Arts, Languages and Social Sciences) is required prior to admission to Year 3.

In preparation for application to the professional program in Year 3, students are strongly encouraged to engage in volunteer experiences in human services agencies and organizations in the community.
Aboriginal peoples, persons with disabilities, members of visible minorities, and those who identify as LGBT are encouraged to apply and are eligible to request assessment through the School of Social Work Equity Admissions Policy.

Years 3 and 4: Admission to the professional program in Year 3 requires that students apply to the Office of the Registrar prior to February 1. Applications are available on the School of Social Work website and from the Office of the Registrar. A minimum average of 70% in Social Work courses is required and a cumulative average of 70% is encouraged. References must accompany the application. An interview may be required, and early applications are encouraged. Entry is for the next Fall term only, and enrollment is limited. Students who are accepted to Year 3 will be notified by the Office of the Registrar. Selection of candidates for admission will be based on grades and other relevant criteria determined by the Social Work Admissions Committee.

The Year 3 and 4 accredited professional Social Work program is intended for full-time study. A full-time course load in years 3 and 4 is defined as 5 courses per term. Students who are not able to attend on a full-time basis at any point after admission to the program must seek advice from the School of Social Work. Students who have not taken a course in the Social Work program within one calendar year of admission will be required to leave the program so that other applications may be accommodated.

Time for degree completion: Students are expected to complete their degree plan of study on a full-time basis. Those who may require additional time to complete their degree requirements must present their request in writing to the Undergraduate Studies Committee. Requests from persons with disabilities requiring accommodation are welcomed.

Transfer from other programs: Applicants transferring from other programs will be assessed individually by the Office of the Registrar and are subject to the same admission procedure to Year 3 as outlined above.

Honours Bachelor of Social Work (for University Graduates)

Two-Year Program

University graduates with a three-year degree in Arts or Social Sciences or 30 courses in Arts or Social Sciences, with a minimum cumulative average of 70%, or an average of at least 70% in their last twenty courses taken, may be considered for admission to a two-year, four-semester program leading to a Bachelor of Social Work (B.S.W.) degree. Applicants are strongly encouraged to engage in volunteer experiences in human services agencies and organizations in the community. Applicants must apply to the Office of the Registrar prior to February 1 for September admission.

Honours Bachelor of Social Work and Diaspora Studies (Combined Honours), Honours Bachelor of Social Work and Women's Studies (Combined Honours), Honours Bachelor of Social Work and Disability Studies (Combined Honours)

In these joint honours degree programs, students have to meet the entry requirements for both areas. Admission to years 1 and 2 is open to all qualified students. However, admission to the professional program in year 3 requires

application prior to February 1st for a September admission. For admission consideration, students will have completed a minimum of 20 courses including required courses from Social Work and Women's Studies,Diaspora Studies, and/or Disability Studies.

FIELD PRACTICE COURSES

All Social Work programs are fully accredited by the Canadian Association for Social Work Education (CASWE) and are organized as sequences which combine studies in the social sciences, the humanities, and other course options along with professional courses in social work. The objective of the programs is to prepare graduates for generalist Social Work practice and for graduate Social Work study. Field education is an essential requirement of the Social Work program, and successful completion of Field Education courses is required for graduation. This may involve travel and/or weekend hours, and students are responsible for transportation to and from their field placement. All students will be assigned a field placement in a human service organization or community setting. Theory and Practice of Generalist Social Work courses 47-336, 47-337, 47-338, and 47-339 are taken prior to Field Education courses.

SOCIAL WORK: PROGRAMS
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KINESIOLOGY

Program Information

The emphasis in the Bachelor of Human Kinetics degree is on providing students with an understanding of human physical activity in its broadest sense, rather than upon the details of professional practice and teaching methodologies.

A Bachelor of Human Kinetics degree may be earned either through a regular, eight-term program of study, or through the twelve-term Co-operative Education Program, which combines classroom and related work term experiences. In both programs, students follow a common core of Kinesiology and other courses and then specialize in one of three honours Majors: Movement Science, Sport Management, and Sport Studies.

Human Kinetics "Core" Courses

Human Kinetics "Core" Courses: 95-200, 95-205, 95-211, 95-225, 95-265, 95-280, 95-250, 95-269, 95-270; plus five of 95-210, 95-230, 95-240, 95-260, 95-285, 95-222, 95-224, or 95-350).

Upon completion of the Human Kinetics "Core" requirements, students will select a major from Movement Science, Sport Management, or Sport Studies. This selection must be done through the Office of the Registrar prior to registration for the fifth semester, or at the end of the fourth semester.

Co-operative Education Program in Kinesiology

The Co-operative Education Program is designed for highly motivated students who wish to develop their skills, increase their knowledge, and gain career-related experience. Students must first be admitted to Kinesiology and are eligible to apply then for the twenty-five available co-op openings in the Fall of their first term of study.

The following criteria have been established to evaluate such applications:

1)academic achievement based on fall term marks;
2)previous volunteer and paid work experience;
3)an application form and resume;
4)an interview with the student.

Admission decisions will be made in the Winter term of the student's first year of study.

Withdrawal from the co-op program will be granted on an exception basis only as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the 1st Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

Co-operative Program students must complete the course requirements for one of the ~~two~~ three Kinesiology majors (Movement Science, Sport Management, Sport Studies) and also register during their work terms in courses 95-299, 95-399, and

95-499 successively. Each work term will be graded on a Pass/Fail basis as a result of the successful completion of each of the following:

- Submission of learning objectives approved by the employer
- Work term assessment evaluation by the employer
- Final employer work term evaluation
- Work term report evaluation by faculty and by the employer
- Work term presentation evaluation by faculty

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

A Co-operative Program fee is charge in each term beginning with the Winter term of Year 2. The fee is not a job-placement fee, but is levied to help defer the administrative costs associated with the program.

WORK/STUDY SEQUENCE

Option One

FIRST YEAR
Fall Term: Study term.
Winter Term: Study term.
Summer Term: Off.

SECOND YEAR
Fall Term: Study term.
Winter Term: Work term.
Summer Term: Study term.

THIRD YEAR
Fall Term: Work term.
Winter Term: Study term.
Summer Term: Work term or optional term.*

FOURTH YEAR
Fall Term: Study term.
Winter Term: Study term.
Summer Term: Work term or optional term.*

FIFTH YEAR
Fall Term: Study term.

*The requirement of a third work term may be fulfilled in the Summer of either the third or fourth year.

Option Two: Fast-Track

Students wishing to complete their co-op degree in Kinesiology may do so in four years. This requires careful planning and scheduling. Students wishing to "fast-track" through their co-op degree are advised to meet with the faculty contact for co-op in Human Kinetics to discuss a strategy.

KINESIOLOGY: PROGRAMS
KINESIOLOGY: COURSES

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FACULTY OF ARTS, HUMANITIES, AND SOCIAL SCIENCES (FAHSS)

GENERAL INFORMATION ABOUT HONOURS AND GENERAL PROGRAMS

Bachelor of Arts - Four-Year Honours Programs

Four-year Honours programs require the completion of a larger number of courses with greater concentration in a specific subject area than do three-year General programs.

Total courses: A student will qualify for the Honours B.A. degree by passing forty courses, with standing as specified in undergraduate regulations.

Major requirements: Specific major requirements for the four-year Honours programs vary depending upon the area of study. Individual programs, which may provide for specialization in a single subject or in a combination of related subjects, are outlined under the heading "Programs of Study" in each subject area.

Other requirements: Honours and combined Honours programs in each area of study may identify courses in areas of study other than the major that must be completed. These are specified under the heading "Programs of Study" in each subject area.

Bachelor of Arts - Three-Year General Programs

Three-year General programs provide a moderate concentration in a specific subject, as well as a broad educational background. Students in these programs are encouraged to extend their studies over a wide range of subjects. Students are also encouraged to take courses which specifically address diversities of human experience, including culture, ethnicity, gender, or sexual orientation.

Total courses: A student will qualify for the General B.A. degree by passing thirty courses with standing as specified in undergraduate regulations.

Major requirements: At least ten and not more than sixteen courses must be chosen from one subject, which constitutes the major field. The specific requirements for a major are listed separately for each area of study. Normally, at least two courses from the major field should be included among the first ten courses taken.

Other requirements: General B.A. degree programs in each area of study may identify courses in areas of study other than the major that must be completed. These are specified under the heading "Programs of Study" in each subject area.

Students are advised to fulfill these requirements by the end of their second year.

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ORGANIZATIONAL LEARNING AND TEACHING: COURSES (14-80-XXX)
NOTE: The Organizational Learning and Teaching courses are offered by the Faculty of Education, through Interfaculty programs.
Courses that lead to the Minor in Organizational Learning and Teaching can not be counted towards a Bachelor of Education.

80-400. Diversity and Inclusion in the Learning Organization
This course will examine the evolution of the concepts of diversity and inclusion in social organizations, key management practices for improving performance, and current diversity and inclusion challenges in organizations. Diversity and inclusion are important aspects of learning organizations for the purpose of developing strategic options for improvement in many different ways.

80-405. Instructional Technologies
This course has been designed to provide students with an introduction to theoretical and practical issues pertaining to the use of informational and instructional technologies in learning organizations. Students will examine and critique the context of the field of instructional technologies and learn to apply current instructional technologies and media to instructional design and practice and the enhancement of learning opportunities. Basic concepts in educational technology, major developments, the present status of informational and instructional technologies, key principles of educational technology as an approach and tool for teaching and learning, and the development of appropriate educational technologies in terms of a learning organization's goals will also be examined. Technological literacy will be emphasized throughout while exploring computer applications, the utilization of converging digital technologies, and the use of the internet and web resources.

80-410. Learning-Centred Teaching: Planning, Delivery, Assessment, and Evaluation
Students will learn about principles and theories of learning-centred practices. Specifically, students will critically examine and synthesize the findings of current research and scholarly texts on teaching and learning to develop a critical personal understanding of learning-centred practices that are applicable to a wide range of diverse workplace contexts. Through assigned readings and texts, students will acquire, integrate, and apply knowledge pertaining to planning, instructional delivery, and the assessment and evaluation of learning. Self-, peer-, and teacher-evaluated assignments will provide students with opportunities to integrate research and practice and to facilitate the development of particular skills, notably, interpersonal communication skills, planning, facilitation and organization of learning, critical thinking, inquiry learning, and reflection.

80-415. Learning Organizations: Management and Leadership
Students will learn about current management theories and practices in contemporary learning organizations where learning is a primary or significant characteristic or quality of the organization. Specifically, from a leadership perspective, this course will examine the nature of leading and managing in learning organizations, the role of learning, and the complex legal, ethical, and social issues that give shape to the organization and its leaders. Through the use of a variety of resources and approaches, students will explore and question theories, models, tools, and best practices for managing and leading in learning organizations, prompting and providing critical perspectives and practical tools that may be applied in different contexts.

80-420. Theories of Individual and Collective Learning
Students will examine current theories pertaining to learning and learners in diverse organizational contexts. Particular themes will be examined, including the nature of learning, patterns of growth and development, the dynamics and complexities of learning in diverse educational contexts, and current educational realities in society. Specifically, students will examine a number of important issues, such as: learning and cognitive processes; personal, social and moral development; individual and group differences; social-cognitive views (e.g., racial discrimination, bullying, harassment, abuse, gender bias, xenophobia, homophobia, stereotyping); motivation and cognition relevant to individual and collective learning; knowledge construction and higher-order thinking. In this course, students will develop a critical awareness of learning theories and related issues and will critique, analyze, and reflect on the underlying assumptions associated with matters and the implications for individual and collective learning

in learning organizations.

80-480. Experiential Learning Field Placement
This course has been designed to provide students with an experiential learning opportunity with which to connect theoretical and practical issues in a field-based learning environment. Under the guidance of the course instructor and the partners in the field, students will engage in a collaborative process leading to the production of a final paper on an issue or topic of inquiry of relevance to the partners in the field. This course will present students with authentic assessment tasks that situate their on-going inquiries in a context that enables them to apply and further critique what has been previously learned. Students will engage in matters pertaining to learning and learners applicable to research, needs assessment, program review, and policy development, as appropriate. The final project will be grounded in the field experience, and will show evidence of knowledge, skills of inquiry, reflection and problem-solving acquired through the other courses. This course will be taken following completion of the other course-work in the minor option.

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INTERFACULTY - COURSES:

51-160. Animals and Humans in Society
This course will explore and consider the different types of relationships between animals and humans in contemporary society from a variety of physical, social, and psychological perspectives. Topics may include companion animals, animal rights and welfare, animals and food and entertainment, human-animal violence, and animal-assisted therapy. (Can be taken for either Social Science or Arts credit).

51-200. The Paw & the Pen: Animals in Literature
This course explores the varying and significant ways in which animals are represented in literature. Throughout Western literary history, animals appear in a variety of images, symbols, characters, and themes, which can be studied from a wide array of critical perspectives: natural realism; animal society; anthropomorphism; pests vs. pets; “owned” beings vs. companions; ecocriticism; cultural icons; and ethically and morally. The way in which animals both influence and reflect societal values is examined through human-animal relationships portrayed in selected texts, through class discussion and written analysis. (Can be taken as either a Social Science or Arts option.) (Prerequisite: 51-160 for Minor in Anthrozoology only.) (Open to English majors with semester 3 standing.)

51-260. Animals For Sport and Entertainment
Building on Animals and Humans in Society (51-160), this course will focus on many of the issues, controversies, and paradoxes, which are inherent to human relationships with animals as companions, for human entertainment, and animals in sports. Students will be expected to engage in meaningful discussions and readings, both verbally and through their own writing, applying different perspectives (ie. historical, sociological, cultural, etc.) to relevant topics. Potential topics for this class include: animal fighting as entertainment (cockfighting, dog fighting, bullbaiting, etc.); zoos and aquaria; circuses and rodeos; pedigree dogs and dog shows; and racing (greyhounds and horses). (Prerequisite: 51-160 or 02-160). (Can be taken as either a Social Science or Arts option).

51-261. Animals and the Law
This course, for undergraduate non-law majors, focuses on the role of law in human-animal interactions and the balancing of competing interests within traditional areas of law. Students will explore and debate the major issues surrounding animal welfare, rights, and protection, including the legal status of animals as living property, and the evolving societal beliefs and values surrounding these issues. The course will primarily focus on examining and comparing the laws of Canada and the United States, although laws and constitutions of other countries, as well as international law, will also be considered.(Prerequisite: 51-160). (Can be taken as either a Social Science or Arts option).

51-360. Special Topics in Anthrozoology
This course focuses on a selected topic in Anthrozoozology, which may vary according to special faculty interests and/or significant current issues. Among others, topics could include: Animals in the Arts; Companion Animals; Human-Animal History; Politics and Animals; Food and Sustainability; Zoos; Animals in Religion, etc. (Prerequisite: 51-160). (2 lecture hours a week). (May be repeated for credit, with permission of the instructor, if content is different). (Can be taken as either a Social Science or Arts option).

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ODETTE SCHOOL OF BUSINESS

PROFESSIONAL AND CERTIFICATE COURSES

Designated courses in the Management and Labour Studies area meet the educational requirements for achieving Professional Designation by the Human Resources Professionals Association of Ontario (HRPAO). Consult with a Faculty Advisor in Management and Labour Studies for details.

The Michigan State Board of Accounting accepts graduates of the program with a major in accounting for the Certificate Examination.

The Institute of Chartered Accountants of Ontario, the Society of Management Accountants of Ontario and the Certified General Accountants' Association of Ontario grant graduates of the Bachelor of Commerce program credits towards professional certification for the satisfactory completion of certain Business Administration courses. A faculty advisor in Accounting should be consulted with respect to the specific exemptions available.

BUSINESS: COURSES
BUSINESS: PROGRAMS

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FACULTY OF EDUCATION AND ACADEMIC DEVELOPMENT

GENERAL INFORMATION

History

The Faculty of Education and Academic Development, University of Windsor, was established on July 1, 1970, thus becoming the seventh Faculty in the University. Its predecessor, Windsor Teachers' College, founded in 1962, trained its students to teach in the elementary schools of Ontario. Integration with the University opened the way to the development of new programs of study designed to prepare candidates for teaching in both elementary and secondary schools.

The Role and Mission of the Faculty of Education and Academic Development

The Faculty of Education and Academic Development, University of Windsor, promotes the professional and scholarly growth of teachers at all levels as reflective, caring, competent and innovative educators. We advance knowledge and contribute to the improvement of pedagogical practice through our teaching, our research and scholarly activities, and our community service and development. Our undertakings are informed and shaped by a commitment to equity and social justice.

We approach teaching and learning primarily from a constructivist perspective, which builds upon the philosophical principles of progressive education. Some key elements include student-centred active learning, authentic activity, and integration of prior experiences. We are focused on providing prospective teachers with what they need to know in order to teach diverse student bodies. We value teaching in ways that emphasize the understanding of differences that may arise from diverse cultures, family experiences, multiple intelligences, and learning styles. Informing the design of our pre-service program are the following beliefs:
•effective teachers are able to work with students with a wide range of learning needs, including those with exceptionalities;
•teacher candidates learn best by doing and reflecting, collaborating with skilled professionals, and by sharing their experiences; and
•teacher candidates should be provided opportunities to develop a professional sense of accountability, which includes an understanding of the social and moral responsibilities that underlie the practice of the teaching profession.

The ultimate purpose of the Faculty of Education and Academic Development is to enable teacher candidates to prepare their students to be responsible and productive citizens. We stress to our teacher candidates the importance of recognizing the enormous influence they will have on students. They must continuously evaluate what students are thinking and modify their plans to take into account what they discover. In this regard, we promote the notion that teachers are powerful classroom ethnographers with the ability to analyse and explain to themselves and to others why they do the things they do. We believe teacher candidates should internalize the dispositions and skills needed to study their teaching and take responsibility for their own professional development and lifelong learning.

GENERAL REGULATIONS AND ENROLLMENT LIMITATIONS

Students who have completed a degree in Education through the consecutive pre-service program, or who have completed Education courses in a Concurrent program, may not count any of the Education courses toward another degree.

The Faculty of Education and Academic Development reserves the right to limit enrollments in any program or individual course of instruction described in this Calendar in cases where the Faculty's teaching and other resources cannot accommodate all of the qualified applicants. In addition, not all courses listed may be offered.

EDUCATION: PRE-SERVICE COURSES
EDUCATION: IN-SERVICE COURSES

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FACULTY OF ENGINEERING

PROGRAM INFORMATION
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CO-OPERATIVE EDUCATION PROGRAM

PROGRAM INFORMATION

The engineering curriculum leading to the BASc. degree has been designed to offer students an education that is immediately valuable to them on graduation and which, at the same time, provides a foundation to accommodate their further education in industry or research.

Those interested in pursuing graduate studies should consult the graduate calendar information on the Integrated B.A.Sc./M.A.Sc. program.

The first year is common in order to give the student an introduction to general engineering principles and to allow investigation of a special field of interest for subsequent years of study.

The Co-operative Education Program is available in Civil Engineering, Electrical Engineering (Microelectronics Option), Electrical Engineering (Communications Engineering Option), Electrical Engineering (Computer Engineering Option), Environmental Engineering, Industrial Engineering, Mechanical Engineering, Mechanical Engineering (Materials Option), and Mechanical Engineering (Automotive Option).

While engineers must work within the technologies of the times, they are also responsible for the continual development of these technologies. The flexibility demanded of the engineer must be based upon proficiency in the physical sciences, and a confident ability to apply the sciences to the benefit of humankind. Therefore, our engineering programs are founded upon a substantial content of mathematics, physics, and chemistry; and our engineering subjects are taught with a view to familiarizing the students with contemporary practice, and teaching them those methods of analysis, design, and realization which they will be able to apply to a continually developing discipline.

The aim of the engineer is to apply the latest science and technology for the betterment of society; engineers must, therefore, realize their duties to society and, as a prerequisite, appreciate how civilizations have developed to their present states.

The independent responsibility that we wish to see in practicing engineers is impressed upon our students by emphasis on laboratory work, tutorials, projects, and assignments. Further, the student is assisted in individual studies by counselling and professional development seminars.

These activities encourage a close and profitable student professor relationship and facilitate the interchange of engineering information and experience to develop the professional maturity and integrity of the student.

ACADEMIC REGULATIONS

Students are directed to become familiar and to comply with the general regulations of the University which apply to all students. Additionally, programs within the Faculty of Engineering have particular regulations. Students enrolled in Engineering programs also must comply with these particular requirements.

Students also are directed to read the "Statement of Responsibility" on the inside front cover.

COURSE CHANGES

All course changes subsequent to registration require the written approval of the Associate Dean of the Faculty.

COURSES NOT PART OF THE ENGINEERING PROGRAM

A student may register for courses additional to those in the Engineering program only with the permission of the Head of the department in which the student is enrolled and the Associate Dean.

CALCULATION OF AVERAGES

1) A student's academic evaluation is based on a cumulative average of grades weighted as follows: The weight of a one-term course is equal to the number of lecture hours per week, plus one-half the number of tutorial or laboratory hours per week.

2) All courses taken as part of the Engineering Program, are used to calculate a cumulative average. Similarly, all marks obtained in courses in the major area of study are used to calculate major averages. Provided that the course is available in a subsequent registration period, a student may repeat a course only once for purposes of upgrading a major or cumulative average. Both the original mark and the upgraded mark obtained will remain on the student's official record. However, only the mark received in the second attempt is used in calculating the cumulative and major averages.

SUPPLEMENTAL PRIVILEGES

The Academic Standing Committee may grant a supplemental evaluation privilege for a failed course provided that the student:

(a) has failed only one course in the evaluation period; and
(b) has a grade below 50%; and
(c) has a cumulative average of 60% or better.

If a supplemental evaluation privilege is granted and the student decides to exercise this privilege, the student must register for the supplemental and pay the appropriate fee. Once a student has registered for a supplemental evaluation and the required evaluation method has been prescribed, the evaluation will occur at the time and place prescribed by the Faculty of Engineering. Failure to write after registering for the supplemental evaluation will result in a failing grade being assigned. Both the resulting grade and the original grade will be shown on the student's transcript and will be included in the determination of the student's cumulative average.

GRADUATION REQUIREMENTS

In addition to complying with the general university regulations an Engineering student must complete the program within eight years of study from the date of first registration in an Engineering program.

CO-OPERATIVE EDUCATION PROGRAM

The Faculty of Engineering Co-operative Education Program offers students the opportunity to combine their classroom experiences with career-related work experiences. The Co-operative Education Program is based upon the principle that the preparation of undergraduate Engineering students can be enhanced by blending career related work experience with a quality curriculum.

Admission to the Co-operative Education Program is competitive. Students who apply and are accepted into the Program must successfully complete three or four paid work experiences, normally interspersed throughout the four-year honours program, in addition to specified program requirements. The experience gained while participating in these structured and supervised work placements is viewed as an integral component of the student's education program.

Industrial Engineering students have to take an intership position, of at least three (3) terms in duration, to fulfil the requirements.

Note: Under extenuating circumstances, first year Engineering students may be considered for a co-op term in their first year at the discretion of Faculty of Engineering.

APPLICATION PROCEDURE

Students who are granted admission to the Engineering program are offered the option of participating in the Co-operative Education (Co-op) Program at three different times as follow:

1) Applicants to the Engineering program who are offered admission to first-year with a mid-term average of eighty percent or higher will be sent an application to participate in the Co-op Program, along with their acceptance package.

2) All other students who are accepted to first-year of the Engineering program will be given an application to participate in the Co-op Program during their course in Professional Development in September.

Academic criteria for participation will vary depending upon the number of Co-op applicants and the number of co-op jobs expected to be available. Decisions regarding participation in the Co-op Program will be finalized by the Centre for Career Education in the Winter term of the students' first year of study. Actual registration in the Co-op Program and fee assessment will not occur until students obtain their first work assignment in the Summer term after their first Fall and Winter terms of study.

3) During the summer before the second year of the Engineering program, all students who have completed their first year and have achieved the Engineering Co-op academic requirement of a cumulative average of 60% or better and no more than one failure may be considered for admission to the Co-op program, but a higher average will usually be required.

Second-year applicants are evaluated on the basis of their first-year academic achievement, paid and volunteer work experience, application and an interview.

Decisions regarding acceptance into the Co-op Program will be finalized by the Centre for Career Education in September. Registration in the Co-op Program and fee assessment will also occur at this time.

Withdrawal from the co-op program will be granted on an exception basis only as it must be determined that the student has no outstanding commitments to employers. Students who wish to withdraw must meet with a Co-op Coordinator and complete a withdrawal form. However, the only time a student may withdraw from an undergraduate co-op program without further co-op fee payment implications is by the 1st Friday of classes after their first co-op work term. Students who withdraw from Co-operative Education at any other time will be liable for paying the co-op fee for the term in which they are dropping and one additional term. This will help offset the costs of developing another student for placement.

In the interest of building solid partnerships with employers, students who have accepted a co-op employment offer (either by ranking a position in round 1 of the job competition or by accepting a position either verbally or in writing in later rounds) must honour that commitment. Therefore, once students have accepted an offer of employment for a work term, they will be considered registered in the appropriate work term course and must remain in the co-op program until they have completed their work term requirements. Failure to honour these commitments and/or to complete all work term requirements will lead to being required to withdraw from the co-op program and will result in a failing grade on his/her transcript for that work term.

CO-OP JOB SEARCH PROCESS

All Co-op positions must be full-time, paid, related to the degree program and approved by the University. The process of securing a co-op position is competitive. Co-op students will apply for work opportunities as advertised by the Centre for Career Education using an Internet-based software program and employers will make interview and hiring decisions. Students are also encouraged to seek co-op employment outside of the advertised postings by completing a guided job search process facilitated by the Centre for Career Education.

SEQUENCE OF WORK AND STUDY TERMS

FIRST YEAR
Fall Term: Study term
Winter Term: Study term
Summer Term: Work term

SECOND YEAR
Fall term: Study term
Winter term: Study term
Summer Term: Work term

THIRD YEAR*

Fall Term: Study term
Winter Term: Work term
Summer Term: Study term

THIRD YEAR* (for Environmental Engineering)
Fall Term: Study term
Winter Term: Study term
Summer Term: Work term

FOURTH YEAR
Fall Term: Work term
Winter Term: Study term
Summer Term: Study term

ACADEMIC STANDING

After each study term, Co-op students' academic records will be reviewed to ensure that they meet the academic requirements necessary to remain in the Co-operative Program. The Co-op academic requirement is a cumulative average of 60% or better and no more than one outstanding failure.

WORK TERM EVALUATION

A student's performance in a Work Term will be evaluated as either "Pass" or "Fail". To obtain a "pass" evaluation, a student must successfully complete all the requirements of the Co-operative Program as described in the rules and regulations handout provided to all co-op students and available from the Centre for Career Education.

CO-OPERATIVE PROGRAM GRADUATION REQUIREMENTS

In addition to the requirements for graduation from the regular B.A.Sc. program, students in the Co-operative Program must satisfactorily complete three work terms, including a final, Fall work term, unless a student is involved in an internship which is approved for different specific conditions.

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FACULTY OF ENGINEERING: NON-TECHNICAL ELECTIVES

For complete descriptions of the courses listed below, see the respective area/program sections of this Calendar.

Not all courses will be offered each year. All courses are three hours a week unless otherwise indicated.

Consult the Office of the Associate Dean (Academic) for the current list of approved non-technical elective courses which have been chosen to satisfy the Complementary Studies requirements of the Canadian Engineering Accreditation Board.

Psychology:
46-115. Introduction to Psychology as a Behavioral Science
46-116. Introduction to Psychology as a Social Science
46-240. Psychology of Sex and Gender

Sociology:
48-101. Principles and Methods of Sociology
48-204. Sociology of the Family
48-205. Sociology of the Sex
48-251. Women, Sexuality and Social Justice
48-306. Sociology of Women
48-340. Food and Global Sustainability
48-351. Gay and Lesbian Studies

Anthropology:
49-111. Introduction to Physical Anthropology and Archaeology
49-112. Culture in Comparative Perspective
48-306. Sociology of Women
48-340. Food and Global Sustainability (Also offered as Sociology 48-340.

Communication, Media and Film:
40-101. Introduction to Communication Studies: Media and Society
40-360. Public Opinion, Public Relations, and Propaganda
40-430. Communication and Ethics

History:
43-113 Europe Encounters the World: Facing Islam, 8th-15th Century
43-114 Europe Encounters the World: The Age of Discovery, 15th-18th Century
43-123. The World in the Twentieth Century, 1914-1945
43-124. The World in the Twentieth Century, 1945-Present
43-201. Early Modern Europe (Students cannot receive credit for both 43-115 and 43-201.)
43-202. Modern Europe (Students cannot receive credit for both 43-116 and 43-202.)
43-218. War in the 20th Century
43-220 History of Africa , 700-1800
43-243. Canada from Early European Contacts to the Origins of Confederation, 1600-1867
43-244. Canada since Confederation, 1867 to the Present
43-246. Aboriginal Peoples in Canadian History: Beginnings to Mid-Nineteenth Century
43-247. Aboriginal Peoples in Canadian History: Mid-Nineteenth Century to the Present
43-249. Women in Canada and the United States, 1600-1870
43-250. Women in Canada and the United States, 1870-Present
43-251. History of Women's Movements in North America (Also offered as Women's Studies 53-200.)
43-261. History of America, 1600-1877
43-262. History of America, 1877 to the Present
43-272. Modern Latin America
43-287. History of Crime
43-301. Culture, Literacy, and the Printed Word in Modern Europe and North America
43-321. Colonialism in Africa, 1830s-1960s

43-336. Becoming Visible: Women in European History
43-361. Slavery In North America, 1600-1877
43-435. The Early Modern Atlantic World

English Language, Literature, and Creative Writing:
26-128. Images of Women in the Literature
26-140. Topics in Literature
26-314. Topics in Medieval Literature

Labor Studies:
54-100. Labor and Social Movements in Canadian Society
54-105. Working for a Living
54-200. Labor Law and Policy
54-204. Worker Health and Safety

Languages, Literatures and Cultures:
08-261. Arabic Culture I: Introduction to Arabic Culture
08-262. Arabic Culture II: Modern Arabic Literature
07-100. Religion and Culture
07-230. Christianity: Early Church to the Reformation
07-231. Christianity: Reformation to the Modern Age
07-220. Language, Linguistics and Society
07-137. Introduction to German, Italian, and Spanish Literature
07-237. German, Italian and Spanish Literary Traditions (Antirequisties: 07-237 and the former 07-334.)
07-202. Culture and Ideas: From the Black Death to the Enlightenment
07-203. Culture and Ideas: From the French Revolution to the Present
07-235. To Auschwitz and Beyond: Reflections on the Meaning of the Holocaust
07-236. Surviving Survival: Reflections on Genocide, War and Trauma
10-262. Special Topics in Chinese Culture
11-161. Introduction to Greek Civilization
11-162. Introduction to Roman Civilization
11-211. Greek Prose
11-212. Greek Poetry
11-280. Topics in Classical Culture
15-248. German Cinema
15-260. German Culture and Civilization I
15-261. German Culture and Civilization II
21-260. Italian Culture and Civilization I
21-261. Italian Culture and Civilization II
23-248. Spanish Cinema
23-260. Culture and Civilization of Spain
23-261. Culture and Civilization of Spanish America
29-141. Introduction to Literary Studies (Note: 29-141 is a prerequisite course for all literature courses in French Studies.)

Interdisciplinary Studies:
07-202. Culture and Ideas I
07-203. Culture and Ideas II
02-100 Introduction to Canadian Studies

Philosophy:
34-110. Introduction to Western Philosophy
34-112. Philosophy and Human Nature
34-129. Contemporary Moral Issues
34-130. Philosophy and Popular Culture
34-160. Reasoning Skills (Antirequisite: 34-161 and 34-162.)
34-221. Introduction to Ethics
34-224. Business Ethics
34-226. Law, Punishment, and Morality
34-227. Environmental Ethics
34-228. Technology and Human Values
34-237. Labour and Social Justice (Also offered as 54-237.) (Prerequisite: 2nd semester standing.)
34-240. Philosophy of Religion (Prerequisite: Semester 3 or above standing.)
34-252. Existentialism (Prerequisite: Semester 3 or above standing.)
34-253. Philosophy of Science
34-255. Knowledge and Community (Prerequisite: semester 3 or above standing.)
34-273. Ancient Greek Philosophy (Prerequisites: Semester 3 or above standing and one prior Philosophy course.)
34-274. Aristotle (Prerequisites: Semester 3 or above standing and one prior Philosophy course.)
34-323. Globalization and Social Justice (Prerequisite: Semester 3 or above

standing, or permission of the instructor.)
34-329. Animals and Ethics (Prerequisites: Semester 3 standing and at least one prior Philosophy course, or permission of the instructor.)
34-330. Theories of Nature (Prerequisites: Semester 3 standing and at least one Philosophy course, or permission of the instructor.)
34-342. Philosophy of Education (Prerequisites: Semester 3 or above standing and at least one prior Philosophy course, or consent of the instructor.)
34-356. Mind Design and Android Epistemology

Political Science:
45-100. Introduction to Canadian Government and Politics
45-130. Comparative Politics in a Changing World
45-160. Issues in World Politics
45-201. Current Issues in Canadian Politics
45-211. Women and Politics (Also offered as Women's Studies 53-211)
45-212. Environmental Policy and Politics
45-213. Public Opinion, Mass Media and Canadian Democracy
45-214. Legal Process in Canada (Also offered as Law 99-110.)
45-232. Government and Politics of the United States
45-233. Politics of the Developing World
45-238. Political Geography
45-241. Contemporary African Politics
45-244. Government and Politics in Europe
45-249. Political Economy of Agriculture and Food (Also offered in Geography 42-249.)
45-251. Classical Political Thought
45-252. Modern Political Thought
45-260. Politics, History, and Asian Religions
45-261. Politics, History, and Western Religions
45-320. Political Parties and Elections
45-321. The Legislative Process
45-324. Public Infrastructure
45-367 The Politics of the European Union
45-371. Millenarian Movements
45-372. Religious Fundamentalism and Politics
45-373. Islam and Politics
45-379. Politics and Culture

Visual Arts:
28-336. Early Medieval Art (Prerequisites for Visual Arts majors: 28-214 and 28-215.)
28-337. Later Medieval Art (Prerequisites for Visual Arts majors: 28-214 and 28-215.)
28-338. Islamic Art (Prerequisites for Visual Arts majors: 28-214 and 28-215.)
28-339. Japanese Art (Prerequisites for Visual Arts majors: 28-214 and 28-215.)
28-340. Art of India (Prerequisites for Visual Arts majors: 28-214 and 28-215.)
28-341. Art of China (Prerequisites for Visual Arts majors: 28-214 and 28-215.
28-342. The Development of American Art (Prerequisites for Visual Arts majors: 28-214 and 28-215.)

Women Studies:
53-100. Women in Canadian Society
53-106. Women and Religion
53-120. Gal Pals: Women and Friendship
53-130. Imagining Women
53-200. History of Women's Movements in North America (Also offered as History 43-251.)
53-201. Women, Sexuality and Social Justice (Also offered as Sociology 48-251.) (Prerequisite: 53-100 or consent of the instructor.)
53-211. Women and Politics Also offered as Political Science 45-211
53-220. Women's Bodies, Women's Health (Prerequisite: One Women's Studies (53-) course and at least semester 3 standing.)
53-224. Love, Honor, and Obey: Marriage and Gender (Pre-requisite: One Women’s Studies course or 43-251 or permission of the instructor.)
53-230. Gender and Moral Choice (Prerequisite: Semester 3 or above standing and one Women's Studies course or consent of the instructor.)
53-240. Helpmates, Harlots, Deliverers, and Disciples: Women and the Bible
53-250. Women, Movement, and Performance (Prerequisite: one Women’s Studies course.)
53-260. Women and Globalization (Prerequisites: at least Semester 3 standing.)

Economic:
41-110. Introduction to Economics I

41-111. Introduction to Economics II (Prerequisite: 41-110.)
41-221. Intermediate Microeconomics I (Prerequisite: 41-110.)

Business:
75-100. Introduction to Business (Credit cannot be obtained for both 75-100 and 71-140).

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FACULTY OF LAW

GENERAL INFORMATION AND ADMISSIONS POLICY

The Faculty of Law of the University of Windsor was established in 1967, and the first entering class was admitted in September, 1968. Mark R. MacGuigan was its first dean, succeeded by Walter Tarnopolsky, John McLaren, Ron Ianni, Julio Menezes, Neil Gold, Jeff Berryman, Juanita Westmoreland-Traoré, Brian Mazer, and Bruce Elman, each of whom left their personal mark on the Faculty, contributing to the development of a responsive curriculum and meaningful scholarship. On the 1st of January, 2012, Camille Cameron was appointed Dean of Law. The Faculty's commitment to community service has created a unique, socially responsive, and responsible institution dedicated to learning. The Faculty has adopted two institutional themes: Access to Justice and Transnational Legal Issues.

The Ron W. Ianni Faculty of Law building at Sunset Avenue and University Avenue, was opened by then Governor General Roland Michener in 1970, and contains lecture theatres, class and seminar rooms, faculty offices, and facilities which house over 352,000 volumes of The Paul Martin Law Library, the Windsor Yearbook of Access to Justice, a variety of student organizations, the Centre for Transnational Law and Justice (CTLJ), the Law Enforcement Accountability Project (LEAP), the University of Windsor Mediation Services, the Centre for Enterprise and Law, and the student-run Windsor Review of Legal and Social Issues.

At Windsor, law is viewed as a process aimed at the achievement of social ends and justice. Education in the law assists students to understand how legally educated and trained persons may gainfully contribute to the creation and maintenance of the best possible social order.

Windsor Law has developed a varied, yet purposive program of study in which law is seen as part of complex and dynamic social processes: law touches all aspects of human endeavour and is, in turn, fashioned by it. Law's connection with the humanities and social sciences is inescapable both in study and in action. Critical theory, social science research methods, and sound intellectual analysis combine to inform the student of law about underlying, fundamental values and beliefs. The resources and insights of the humanities and social sciences permit our students an opportunity to understand that law study is inextricably related to social, political, practical, and theoretical issues. In large measure, law is about getting things done; it is practical in its orientation. At Windsor Law, theory and practice are not polar extremes along a continuum which separate the practitioner from the academic; practice is seen as the implementation of theory and theory as the positing of, among other things, action.

Recognizing that the discipline of law is complex, our aim is to assist students to acquire intellectual skills and habits of mind suited to law practice and a myriad other careers. They are asked to reflect critically upon the legal system, the legal profession, and the law itself. In doing so, they challenge the assumptions which underlie the status quo and propose options which might better serve the public interest. Since law is tied to all aspects of human relations, law study can and must focus beyond legal doctrine.

Because the environment of the law is rich, supported by community projects, scholarly endeavour, and personal interests, those who participate in its program may pursue a directed, yet personally oriented path for personal and professional development.

The Faculty recognizes the need to be responsive to the challenges of the future and remains flexible about scholarly and curricular endeavour. Its commitment to serve the public need is firm. We at Windsor are proud of our accomplishments in our first thirty years. But we will never rest on our achievements; rather we will build upon them.

The Paul Martin Law Library

The Paul Martin Law Library, with its collection of over 352,000 volumes (including a large microform collection and an audio and video-tape collection), satisfies all

student research needs encountered in the study of Canadian law. A rich source of materials is also available for historical and comparative law purposes, dealing with the law of other common law countries, as well as some aspects of select civilian and socialist legal systems.

In addition to exhaustive coverage of Canadian primary legal materials, the library includes good collections of material from Great Britain, and certain Commonwealth countries.
The library's collection of secondary materials, which is drawn largely from the legal literature of the same countries, is also very good.

Use of the CanLii Canadian legal database system is taught by Law Library staff. In addition, training in other computer systems is available: Lexis/Nexis QL, Westlaw,-and other smaller systems, as well as a collection of legal web subscriptions.

A well-qualified library staff maintains a program to develop and assist in utilizing this strong, well-balanced collection.

In addition to the facilities of the Paul Martin Law Library, students and faculty have easy access to the Leddy Library of the University of Windsor, with its collection of approximately one and a half million volumes and, in connection with certain courses of study, to other more specialized libraries both in Windsor and Detroit.

ADMISSIONS POLICY

For information concerning the current admissions policy and procedures of the Faculty of Law, contact:

Applicant Services (Law Division)
University of Windsor
Windsor, Ontario
N9B 3P4
Phone: 519-253-3000 Ext 6459, 6460, 6461 or 6462
Fax: 519-971-3653
Email: lawadmit@uwindsor.ca

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NURSING

MISSION STATEMENT

As partners, the Faculty of Nursing at the University of Windsor with St. Clair College (Windsor and Thames Campuses) and Lambton College undertake the shared commitment to excellence in the preparation of Bachelor of Science in Nursing (BScN) candidates who embody our core values and the best elements of the art and science of nursing, education, leadership, research, and practice in their professional journeys.

VISION

Excellence in nursing education, practice, and research.

CORE VALUES

In the spirit of collaboration, and through values clarification and group decision-making, the following concepts have been selected to identify and signify the core values of the University of Windsor Collaborative BScN Program. These concepts reflect the foundation upon which knowledge, skills, judgement, communications, relationships, behaviours, and intent of our mission and vision are built.
Health and well-being; Safety; Caring;Collaboration; Professionalism; Leadership; Social Justice; Scholarship; Research; Innovation.

PHILOSOPHY

The philosophy of the Faculty of Nursing at the University of Windsor is outlined in the following statements about our beliefs relative to health, individuals, nursing, learning, teaching, and environments:

HEALTH

Health is a dynamic process whereby the individual, family, or group is able to realize aspirations, satisfy needs, and change or cope with the environment. Health is a resource for everyday life. It is a positive concept emphasizing social and personal resources as well as physical capacity. Health is the goal of all nursing behaviours.

INDIVIDUALS

Individuals are unique holistic persons with inherent dignity and are worthy of respect and care. Individuals have freedom of choice and are accountable for these choices. Individuals are capable of entering reciprocal caring relationships which foster health, growth, and self-actualization.

NURSING

Nursing is a humanistic, caring process, the goal of which is to help individuals, families, groups, and communities achieve and maintain an optimal level of health consistent with their abilities and desires. Nurses, in collaboration with members of the health team and other service providers build on strengths and address health variations to facilitate client maturation and adaptation.

LEARNING/TEACHING

Learning is an individualized activity and involves learners' personal goals, perceptions and unique learning style. Learning is goal oriented and an active life-long process of change and development. Teaching is a facilitative process through which learners are guided and supported. It involves communication, clearly defined goals, appropriate learning activities and a climate conducive to growth. The curriculum is multi-disciplinary and aims to provide the learners with opportunities for intellectual and professional development.

ENVIRONMENTS

Environments are milieus within which individuals, families, groups, and communities strive to achieve optimal health. As human beings attempt to mature and adapt within their environments, there are dynamic interactions which can serve as a source of growth. Environments encompass psycho-social, cultural, religious, political, economic, and physical contexts which impact upon the efforts of all.

Program Outcomes

By the end of the program, graduating students will be able to:
1. Implement behaviours to promote personal and professional self-development.
2. Integrate the ethical, legal, professional and regulatory parameters into Nursing

practice.
3. Formulate clinical judgements that are based on critical inquiry and analytical reasoning.
4. Integrate nursing and multi-disciplinary knowledge into nursing practice.
5. Integrate research findings into clinical practice, education and management.
6. Implement the nursing process to promote, maintain and restore the health of individuals, families, groups and communities.
7. Use the teaching/learning process to promote the health of individuals, families, groups and communities.
8. Collaborate with clients, their families, communities, members of the health team and other organizations for the promotion, achievement and restoration of optimal health.
9. Integrate leadership and management roles into the delivery of health care.
10. Engage in activities to promote the development of the profession of nursing.

NURSING: ADMISSION REQUIREMENTS AND PROGRAM REGULATIONS
NURSING: COURSES
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NURSING

ADMISSION REQUIREMENTS
ADMISSION REQUIREMENTS for Graduates of Lambton College's Practical Nursing Program
PROGRAM REGULATIONS

Additional Information: GENERAL UNDERGRADUATE REGULATIONS

ADMISSION REQUIREMENTS

General Regulations and Procedures
The considerations listed below apply to admission to all Nursing programs.

Degrees in Other Disciplines
Special consideration may be given to applicants holding degrees in other disciplines.

TRANSFERS (PROGRAM TRANSFERS, TRANSFERS FROM ANOTHER COLLEGE OR UNIVERSITY)

Program Transfers
Please refer to the University of Windsor Undergraduate Calendar Admission Requirements for Program Transfers.

Admission by Transfer
Please refer to the University of Windsor Undergraduate Calendar Admission Requirements for Transfer Students

Applications for transfer to Nursing are subject to a March 1 deadline for Fall Admission. Transfer is based on academic achievement and the availability of space, and a minimum 75% cumulative average is required in order to be considered for a transfer to Nursing. In addition all Nursing applicants are required to submit the **Applicant Profile form** no later than March 1. It must be submitted directly to the University of Windsor, Office of the Registrar, Windsor, Ontario, N9B 3P4.

MATURE STUDENTS

Admission Mature Students
Please refer to the University of Windsor Undergraduate Calendar Admission Requirements for Mature Students.

In addition all Nursing applicants are required to submit the **Applicant Profile form** no later than March 1. It must be submitted directly to the University of Windsor, Office of the Registrar, Windsor, Ontario, N9B 3P4.

Prior Nursing Courses
University courses taken within seven years prior to admission or readmission to any nursing program may be considered for credit.

Selection for Admission
Preference will be given to applicants with the best qualifications. Selection of candidates for admission to the various programs will be based on criteria determined by the Faculty of Nursing Admissions Committee.

Advanced Standing Examinations

Registered Nurse students who wish to write the advanced standing examination for Nursing 63-230 must petition the Faculty of Nursing for permission at least two months before the course start date or within the first year of the program. Registered Nurse students may also be permitted to write advanced standing examinations in 63-331, 63-333, and 63-433. These examinations are available only to those registered nurses who can demonstrate via a portfolio prior knowledge of the course content. Portfolios for 63-331, 63-333, and 63-433 must be submitted at least two months before the course start date for evaluation. A

non-refundable fee will be applied for each portfolio evaluated.

Advanced standing examinations will be scheduled within two weeks after the beginning of the term in which the courses are offered or by appointment. Students who pass these examinations will have the notation "Advanced Standing by Examination" entered on their transcripts. The normal charge for advanced standing examinations will be applied. Students who are unsuccessful are not permitted a second challenge attempt and must take the course.

Health Requirements

Students in all nursing programs must be cleared for clinical via a pre-clearance process prior to the start of their clinical course(s). This is the financial responsibility of the student.

Other Requirements

1) Students are responsible for their own transportation and living expenses incurred in clinical nursing experiences, including the consolidation experiences. Additional costs may be incurred for participation in some clinical placements. Inability to comply with this requirement may necessitate voluntarily withdrawal from the course to avoid risk of failure due to missed clinical hours.

2) Students are responsible for supplying their own uniforms and accessories. Details pertaining to uniforms and accessories will be sent to those admitted to the program.

3) Applicants who accept admission into all nursing programs are required to obtain Cardiopulmonary Resuscitation (CPR): Basic Life Support for Health Care Providers (HCP) and First Aid preparation before starting the program. Annual CPR re-qualification from a certified instructor is necessary even if a student's card has an expiry date that is longer than one year. This is the financial responsibility of the student.

4) An extended Police Clearance is mandatory on entry, then annually while in the program, and as required by agencies. This is the financial responsibility of the student.

COLLABORATIVE HONOURS B.Sc.N. PROGRAM

1) Six Grade 12 "U" or "M" courses including Grade 12"U" English, Chemistry, and Biology, or their equivalents. One Grade 12"U" Mathematics or equivalent is recommended.
As of Fall 2016: ENG4U, SBI4U, SCH4U, and one Grade 12 mathematics required.

2) An interview with the Faculty of Nursing Admissions Committee may be required.

One-year Pre-Health Science Nursing Program

Students at Lambton College who successfully complete the one-year Pre-Health Science-Nursing Program with a minimum overall grade point average of 2.7 (B), and a minimum science subject average of a 2.7 (B) in BIO 120, BIO 220, CHM 125 and CHM 225, will be considered for admission to the BScN Program.

Students at St. Clair College who successfully complete the one-year Pre-Health Science-Nursing Program with a minimum overall grade point average of 2.7 (B), and a minimum science subject average of (2.7) (B) in GAS 11, GAS 21, GAS 11A and GAS 21A, will be considered for admission to the BScN Program.

TWELVE-MONTH, PRIMARY HEALTH CARE NURSE PRACTITIONER CERTIFICATE PROGRAM FOR DEGREE-PREPARED NURSES

Note: Final intake for this program will be Fall 2008. A full-time 12 month option is available only. All successful applicants need to complete the NP Certificate by August 2009.

1) The applicant must have a Bachelor of Science in Nursing which includes physical assessment, statistics, and a research methods course. An interview with the Faculty of Nursing Admissions Committee may be required. A letter of reference from current or most recent employer is required and a minimum overall nursing average of 70%.

2) Applicants must hold or be eligible for a current certificate of registration as a registered nurse with the College of Nurses of Ontario.

3) Preference will be given to Ontario residents whose work experience in nursing has been continuous and who have clinical experience in one or more of the following areas: primary health care, ambulatory care, public health, community health, long-term care, emergency care, or outpost nursing.

4) Applicants must have the equivalent of two years full-time relevant nursing practice within the past five years.

Note: This is a limited enrollment program. Therefore, possession of minimum published requirements does not guarantee admission.

Information must also be obtained on the internet at http://np-education.ca.

ADMISSION REQUIREMENTS for Graduates of the Lambton College Practical Nursing Program

The following are the admission requirements for Registered Practical Nurses to enter the BScN Program:

· Registered Practical Nursing diploma from a College of Applied Arts and Technology with an overall B (73%) average and no grade less than a C (63%).
· Minimum one year full-time equivalent work experience as a Registered Practical Nurse (RPN) i.e. 2000 hours.
· Current Registration with the College of Nurses of Ontario (CNO) as an RPN with no terms, conditions or limitations on their practice.

Upon entering the program, students must demonstrate successful completion of a clinical simulation exercise (OSCE) to verify current clinical competence. In the event of a student being below the expected level of clinical competence on the OSCE - remediation will be offered by Lambton College, at the student's expense. Students must demonstrate clinical competence at the expected level prior to taking any clinical courses.

Program regulations for progression through the program remain the same as the Collaborative BScN program.

Prior to admission to the program and prior to beginning clinical: a current Basic Cardiac Life Support Certificate (BCLS) and a police clearance (vulnerable populations). Clinical agencies will require a record of immunization (see policies for the Faculty of Nursing, Collaborative Nursing Program).

PROGRAM REGULATIONS

Students are directed to become familiar and to comply with the general regulations of the University which apply to all students. Additionally, students must comply with the regulations particular to Nursing programs within the Faculty of Nursing.

1) For promotion and graduation, nursing students are required to achieve a minimum grade of a 60% in each nursing theory course, achieve a pass in each clinical/laboratory course, and maintain both cumulative and major averages of at least 60%.

2) Students who fail a clinical course may require remediation prior to re-taking the course to ensure competence for safe practice at the expected level in the nursing program. Clinical courses in the nursing program require the application of theory to practice. Therefore, a student who fails a required theory course from the following course couplings will be advised to repeat the paired clinical course to ensure continuing safe clinical practice:
63-171: 63-172
63-173: 63-174
63-271 or 63-273: 63-272
63-275 or 63-277: 63-274
63-373: 63-372
63-375: 63-374

3) Students who failed a required nursing course may not repeat the course more than once. No more than two required nursing courses may be repeated in the

case of failures.

4) Students who wish to repeat a previously passed required nursing course for any purpose may only be considered to do so if they can be accommodated in the course by the professor. However; students are not encouraged to repeat previously passed courses.

5 The program of studies for the four-year basic degree or the program for Registered Nurses must be completed within seven years from the first Nursing course taken (63-).

6) All option courses must be successfully completed prior to the start of Year 4 level nursing courses. Overload is not permitted while taking Year 4 level nursing courses.

7) Clinical placements will be arranged by the Faculty of Nursing to meet the Entry to Practice expectations of the College of Nurses of Ontario for every nursing student. Student preferences will be considered based on availability; however, placements requested cannot be guaranteed.

8) Students are expected to take responsibility for meeting all Faculty of Nursing clinical placement policy requirements and for conforming to any additional agency-specific policies. Students will be denied access to a clinical placement site if they fail to be cleared for clinical placement. The Faculty of Nursing is not responsible for providing an alternative clinical experience for students who do not meet these requirements.

9) All clinical nursing experiences and laboratories are mandatory.

10) In the clinical courses, students must achieve all course outcomes and critical elements.

11) Students are expected to work the clinical shifts arranged for them by the Faculty of Nursing. Shifts may be scheduled during the days, evenings, and/or on weekends. Students may expect to have eight-hour shifts during the first two years of the program, except during consolidation courses where some twelve-hour shifts are possible. In year four, students in preceptored experiences may work eight or twelve hour day, afternoon or night shifts. A student will not be allowed to work more than three days in a row if they are working twelve hour shifts (i.e. three consecutive 12 hour shifts), and must have a minimum 48 hour break before starting the next set of shifts.)

12) During consolidation courses 63-278 and 63-378, student requests to be excused for any reason will not be considered (e.g. for employment, or to take other courses, etc.). A letter to employers explaining the consolidation course requirements is available to students in the Nursing Main Office.

13) Auditing of clinical courses is not allowed.

14) Students who are required to repeat a nursing clinical course must notify the Main Nursing Office, in writing, of their plan to repeat the course by April 30 (for fall return), by September 30 (for winter return) and by January 30 (for intersession/summer return). If a student fails to do so, a clinical placement cannot be provided.

15) Students in good standing who are absent for more than one semester and wish to return to nursing must complete and submit the “Returning Nursing Student Form” available at the Nursing Main Office and/or on the Nursing website prior to registering for any courses and will be required to demonstrate clinical competence before taking any clinical course. The deadlines for submitting the Returning Nursing Student Form are April 30 (for return in Fall), September 30 (for return in Winter), or January 30 (for return in intersession/summer).

16) The Faculty of Nursing reserves the right to remove a nursing student from the clinical placement in instances where the instructor has reason to believe that the student is rendering unsafe and/or unprofessional and/or unethical nursing care, or that the student’s safety is at risk.

17) Students must not give their personal contact information to patients/clients in clinical placements.

18) Post-Diploma students must be in good standing with the College of Nurses of Ontario in order to remain in the program.

19) Post-diploma students who intend to register for 63-432 must notify the Clinical Coordinator by April 30 (for fall registration). September 30 (for winter registration) or January 30 (for intersession/summer registration) so that clinical placements can be arranged for the term.

20) Students with disabilities who require academic accommodations in any nursing course must contact an Advisor in Student Disability Services (SDS) to complete SDS Registration and receive the necessary Letters of Accommodation. After registering with Student Disability Services, students must present their Letter of Accommodation and discuss their needs with their professor(s) as early in the term as possible. Deadlines for submission of documentation and completed forms to Student Disability Services are available on the website: www.uwindsor.ca/disability.

21) Students of the Faculty of Nursing are required to demonstrate behaviours consistent with the University of Windsor standards of acceptable behaviour (see Senate Bylaw 31) and the Professional Standards for Registered Nurses and Registered Practical Nurses; the Standards for the Therapeutic Nurse-Client Relationship; the Ethical Framework for Nurses in Ontario; and the Explanation of Professional Misconduct of the College of Nurses of Ontario; and of the academic policies of the University of Windsor.

Failure of any Nursing student to conform to the principles of these documents may result in dismissal from any of the Faculty of Nursing programs.

Note: The College of Nurses of Ontario requires that in order to obtain permission to write Nurse Registration Examinations and/or apply for Nurse Registration in Ontario, a person must provide a declaration of one's status regarding:
(a)any conviction of a criminal offense under the Narcotic Control Act and the Food and Drugs Act;
(b)being a subject of proceedings with respect to professional misconduct, incompetence, or incapacity in Ontario in another health profession or in another jurisdiction in nursing or in another health profession;
(c)any mental or physical disorder which makes it desirable in the public interest that the person not practice;
(d)a current police clearance within six months of examinations.

Any change in status related to a student's police clearance after clearance has been obtained must be immediately disclosed by the student to the Associate Dean.

If a student is convicted of a criminal offense after admission to the program (or if a prior criminal conviction becomes known after admission to the program), he/she will be denied access to clinical placements as per clinical placement agencies' policies, and will be required to withdraw from the clinical course.

Further Information
Applicants wishing to discuss the program or visit the Faculty of Nursing should contact the campus (519-253-3000, Ext. 2258). Information may also be obtained from the Internet: www.uwindsor.ca/nursing

Major Clinical Resources

Nursing is a profession of diverse opportunity. Clinical experiences are found in a variety of settings.

Examples of the diversity of placements for nursing students are in hospitals, public health agencies, visiting nurse organizations, family support services, doctors' offices and clinics, day care centres and preschools, elementary and high schools, new Canadian multicultural programs, First Nations groups, seniors residences and services, and caring for challenged populations. On campus, practice is done in independent learning laboratories and simulated situations. These experiences and more, lay the foundation for professional nursing.

Awards and Scholarships

Nursing Awards and Scholarships are offered to students enrolled at the University of Windsor, Faculty of Nursing.

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ACADEMIC REGULATIONS

Students are responsible for becoming familiar and complying with the general regulations of the University as contained in this section. Additionally, students must be familiar and comply with the regulations of the Faculty in which they are enrolled. These particular requirements may be found in the program sections of this calendar.

Students also are directed to read the *Statement of Responsibility*, and the calendar of important dates and deadlines under *Academic Dates*.

ACADEMIC ADVISING
CLASSIFICATION OF STUDENTS (definitions for full-time/part-time student, audit student, academic probation, *etc.*)
COMBINED MAJOR (majoring in two subject areas)
COURSE CONTENT
COURSE NUMBERING SYSTEM AND FACULTY AND PROGRAM CODES
DEFINITION OF COURSES AND SESSIONS
OPTIONS (courses in subjects other than the major subject)
TRANSFERRING TO ANOTHER PROGRAM

ADDITIONAL DEGREES
ADVANCED STANDING AND CREDIT TRANSFER (advanced standing and transfer credits reduce the total number of courses a student must complete for a degree)
CERTIFICATE PROGRAMS
COURSE EQUIVALENCY POLICY (permission to substitute one course for another)
COURSE OVERLOAD POLICY (course taken in addition to the prescribed semester or term load)
INTRODUCTORY STATISTICS COURSES
LETTERS OF PERMISSION (permission to take courses at another university for credit towards their UWindsor degree)
MINOR (provides a general knowledge of an area of study)
RESIDENCY REQUIREMENTS (the number of courses that must be completed at the University of Windsor)
REPETITION OF COURSES
SENIOR-LEVEL COURSE REQUIREMENTS (minimum number of courses to be completed at the 200-level or above)
STANDING REQUIRED FOR CONTINUATION IN PROGRAMS AND FOR GRADUATION (minimum major and cumulative averages required to continue in a program of study and to graduate)

ACADEMIC ADVISING

The responsibility for becoming familiar and complying with the requirements for degrees and with academic regulations rests primarily with the student. Every student can access a "Degree Audit Report" on the Student Self Service page at https://my.uwindsor.ca which reports a student's progress towards fulfilling degree requirements.

In addition, academic advising is strongly recommended for all students. Academic units provide individual assistance to students both in the selection of their programs of studies and in the choice of courses in keeping with program requirements. General questions normally should be addressed to the Associate Dean of the Faculty.

Students are strongly urged to seek course and program advising to ensure that they understand degree requirements. It is recognized that many students may not have decided on their major areas or on their final career goals prior to entering University. Consequently, it is not unusual for students to change their programs of study after taking several courses. Every effort is made to assist such students, within the limits of the requirements of the various programs.

Students who are considering program changes may request assistance from advisors within their proposed area of study. Application forms for a change of program are available on the web on the Student Self Service page at

https://my.uwindsor.ca.

Students are required to have declared a major by the time they have successfully completed ten semester courses.

CLASSIFICATION OF STUDENTS
A full-time student is one who is registered in four or more undergraduate courses in a term.

A part-time student is one who is registered in fewer than four undergraduate courses in a term.

A regular student is one who has met the average requirements for admission or the minimum average requirements for continuation in his or her program of studies.

A conditioned student is one who, at the time of admission, does not have standing in a required subject or subjects.

A visiting student is one who registers and takes courses for credit for the purpose of transferring the credit to the university at which he or she was previously registered. Normally, visiting students are advised to have written permission from the home university in order to register for courses.

A special or non-degree student is one who is taking courses for credit but not proceeding to a degree at this University.

An audit student is one who attends (a) course(s) but does not receive any grade(s) or credit for the course(s) towards a degree. Such a student will not be allowed to write examinations and may not be graded in any way, but will be required to pay the regular fees for the course(s).

A student on academic probation is one who has not met the full admission requirements to a program or a student who, once admitted, has shown unsatisfactory progress at the conclusion of the previous term. (See the regulations pertaining to each Faculty.)

Academic probation is removed if a student demonstrates satisfactory progress by the end of the probationary period. Normally, a student will be required to withdraw from a faculty if performance is not satisfactory at the conclusion of the academic probationary period.

For regulations pertaining to the possible readmission of students who have been required to withdraw, see the regulations pertaining to each Faculty.

COMBINED MAJOR

Students wishing to combine two areas of study from the Arts, Languages, Social Sciences, or Science within a single four-year Honours B.A. or B.Sc. program may do so if the areas of study concerned have provided for this possibility in their respective sections of the Calendar. Such programs require a total of forty courses including the successful completion of the major requirements and specified other requirements as defined by each area of study in the appropriate section of the calendar. The area of study selected as the first major will determine the degree awarded. (*e.g.,* BA in English and Chemistry, or BSc in Chemistry and English).

COURSE CONTENT

Information regarding the content and the hours of instruction per week for all courses is to be found in the individual subject area listings. The time schedule for classes can be obtained online at www.uwindsor.ca/registrar/timetable.

The University does not attempt to impose uniformity in methods of course presentation. Therefore, methods of course presentation vary and may involve lectures, lectures combined with class discussion, small group or tutorial instruction, seminars, or other combinations of the above. In all cases, the method(s) to be used will be explained early in the course.

COURSE NUMBERING SYSTEM AND FACULTY AND PROGRAM CODES

Each course is identified by a three-part number. The first part refers to the

Faculty, the second part to the subject area, the third to the level of the course. Thus, the course 02-46-220 would be a course in the Faculty of Arts, Humanities and Social Sciences (02-), in the subject area of Psychology (46-) and would be at a level that places it among courses in the 200 series. The series 100, 200, 300, and 400 numbers are intended to indicate progressively more demanding content and correspondingly increasing background and competence on the part of the students enrolled in the course.

Numbers in the range 100-199 are ordinarily used for the introductory courses in most disciplines. Within the range, however, a lower number does not necessarily signify more elementary content. It is important that students planning their courses have clearly in mind the significance of these numbers so that they may guard against undertaking course work at levels for which they are insufficiently prepared. A number of courses have stated prerequisites which are prior requirements for entry to a course. Students who do not satisfy the prerequisite for a course, or who in the opinion of the instructor do not possess an equivalent background to that of the stated prerequisite, may not register for the course, and may be removed if they register inappropriately.

Faculty of Arts, Humanities and Social Sciences	01- (Arts)/02- (Social Sciences)
Faculty of Science	03-
Faculty of Business Administration	04-
Faculty of Education and Academic Development	05-
Faculty of Engineering	06-
Faculty of Human Kinetics	07-
Faculty of Law	08-
Faculty of Nursing	11-
Inter-Faculty Programs	14-

Program/Course Codes
Note: The Program/Course codes are preceded by the relevant Faculty code.

Arts and Science, 14-56-
Additional Qualification Courses, 05-79-
Biology, 03-55-
Business Administration:

- Accounting, 04-70-
- Business Strategy and Entrepreneurship, 04-75-
- Finance, 04-72-
- Management and Labour Studies, 04-71-
- Management Science, 04-73-
- Marketing, 04-74-

Chemistry and Biochemistry, 03-59-
Civil and Environmental Engineering:

- Civil, 06-87-
- Environmental, 06-93-

Languages, Literatures and Cultures:

- Aboriginal Studies, 01-06-
- Inter cultural Studies, 01-07-
- Asian Studies, 01-10-
- Greek and Roman Studies, 01-11-
- Greek & Roman History, 01-12
- Greek Language & Literature, 01-13-
- Latin Language & Literature, 01-14-
- German, 01-15-
- Italian, 01-21-
- Spanish, 01-23-

Communication, Media, and Film: 02-40-
Forensics, 14-57-
French Studies, 01-29-
General Engineering, 06-85-
Geography: 02-42-
History, 02-43-
Industrial and Manufacturing Systems Engineering, 06-91-
Inter-Faculty, 14-51-
Kinesiology, 07-95-
Labour Studies: 02-54-
Law service courses, 08-99-
Law courses, 08-98-
Mathematics and Statistics:

- Mathematics, 03-62-
- Statistics, 03-65-

Mechanical, Automotive, and Materials Engineering:

- Mechanical, 06-92-
- Automotive, 06-94-
- Materials, 06-89-

Music:

- Music Academic Studies, 01-32-
- Music Performance Studies, 01-33-

Nursing, 11-63-
Philosophy: 01-34-
Physics, 03-64-
Political Science: 02-45-
Psychology: 02-46-
Social Justice: 02-38-
Social Work: 02-47-
Sociology, Anthropology, and

Computer Science, 03-60-
Diaspora Studies, 02-45-
Digital Journalism, 02-30-
Disability Studies, 02-37-
Dramatic Art: 01-24-
Earth Sciences:

Environmental Science, 03-66-

Economics, 03-41-
Education, 05-80-
Electrical and Computer Engineering, 06-88-
English, 01-26-
Environmental Studies, 14-58-

Criminology:

Sociology, Criminology, 02-48-
Anthropology, 02-49-
Planning, 02-50

Visual Arts:

Visual Arts, 01-27-
Art History, 01-28-
Film/Production Courses, 01-39-

Women's Studies, 02-53-

DEFINITION OF COURSES AND SESSIONS

The word "course" generally refers to a 3.00 credit hour offering which is given over one term. Each term includes approximately twelve weeks of classes. During each regular academic year (September to April), the Fall term runs from early September to early December and the Winter term runs from early January to mid-April. Each term concludes with final examinations. Additionally, the University schedules courses in a Summer term which includes Intersession (May - June) and Summer Session (July - August), each of which are approximately six weeks in duration. Courses given in these sessions carry the same credit as those in the Fall and Winter terms. Some courses offered in the Summer Term run from May - August (12 weeks).

In some areas, courses also may be offered for 1.50 credit hours, or for 6.00 credit hours. Courses of any credit hour value may be offered over multiple terms or over a part of a term.

In a few cases a course may be "linked" with another course in the sense that credit is granted only when both courses have been completed successfully. Course descriptions indicate "linked" courses. Unless otherwise indicated, such courses must be taken in successive terms.

The time required to complete programs can vary according to the student's choice. If courses are taken exclusively in the Fall and Winter terms, a general degree normally is completed in three years and a four-year Honours, Major or professional degree in four years of full-time study. Students may choose to accelerate their programs by attending Summer term, Intersession and/or Summer Session, or may spread their programs over a longer period by attending as part-time students. Some programs place a time limit on degree completion. Refer to individual Faculty and program regulations for such limits.

OPTIONS

Options are courses in subjects other than the major subject(s). For the purpose of meeting option requirements the University categorizes its courses as follows:

ARTS(In addition, all Language courses can satisfy Arts options)
Art History
Greek and Roman Studies
Dramatic Art
English and Creative Writing
General Courses, Faculty of Arts, Humanities and Social Sciences (01/02)
Intercultural Studies
Music-Academic Studies
Music-Performance Studies
Philosophy
Visual Arts
Women's Studies*
*The following Women's Studies courses may be taken for Arts credit: 53-106, 53-120, 53-130, 53-230, 53-240, 53-250, 53-236, 53-270, 53-300, 53-335, and 53-345.
The following Inter-Faculty course may be taken for Arts credit: 51-160.

LANGUAGES

Arabic
French
German
Ancient Greek
Italian
Japanese
Latin
Spanish
Hebrew

*Note:*Courses in all languages listed above that may be used to satisfy language option requirements include: xx-100, xx-101, xx-102, xx-200, xx-201, xx-202. xx-300, xx-301. All French Studies courses count as language option requirements. 08-110 and 08-111 (formerly 07-110 and 07-111) also count as language option requirements. All other courses in any language listed above count only as Arts options.

SOCIAL SCIENCES
Anthropology
Communication Studies
Economics***
General Courses, Faculty of Arts, Humanities and Social Sciences (02)
Human Geography (42-)
History
Labour Studies
Planning
Political Science
Psychology
Social Work
Sociology
Women's Studies**
** (53-106, 53-120, 53-130, 53-230, 53-240, 53-250, 53-270, 53-300, and 53-345 can satisfy either a Social Science or an Arts option requirement.)
***All Economics courses will be permitted to satisfy either science or social science options.
The following Inter-Faculty and Environmental Studies courses may be taken for Social Science credit: 51-160, 58-110 and 58-210.

SCIENCE
Biology
Biochemistry
Chemistry
Computer Science
Economics***
Environmental Science
General Courses, Faculty of Science (03)
Geology
Mathematics
Physical Geography (67-)
Physics
Statistics
Women's Studies**

** Women's Studies 53-220 will satisfy either a Social Science or a Science option requirement.
***All Economics courses will be permitted to satisfy either science or social science options.

Note: For students in the Faculty of Arts, Humanities and Social Sciences the following Nursing courses will satisfy a Science option requirement: 63-241, 63-245, 63-351, and 63-391.

PROFESSIONAL
Business Administration
Education
Engineering
Kinesiology
Law
Nursing

PROGRAM TRANSFERS (Transfering to Another Program)

A student who wishes to transfer to a new program may apply on the web on the Student Self Service page at https://my.uwindsor.ca. All program transfers and conditions for transfer are subject to the approval of the Dean in accordance with regulations established by the Faculty into which the student wishes to transfer.

1) Normally a student who has a cumulative average of 60% or greater in the previous program, and who meets the admission requirements of the intended program will be permitted to transfer. Transfer credit will be assessed and awarded in accordance with the Senate Policy on Advanced Standing and Credit Transfer.

2) If a student has been required to withdraw from a program, the student normally will be considered for admission to the new intended program on the same basis as students who have been required to withdraw from the program.

3) All courses that are transferable, whether passed or failed, will be considered in calculating both the cumulative and major averages (where appropriate) in the new program.

4) Applications for transfer to Business are subject to the following deadlines:

- June 15th for Fall semesters
- October 15th for Winter semesters
- February 15th for Inter/Summer semesters

Transfer is based on academic achievement and the availability of space, and a minimum 67% cumulative average is required in order to be considered for a transfer to Business.

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ELECTRICAL AND COMPUTER ENGINEERING

Program Regulations and Information

Electrical Engineering encompasses a large number of exciting and diverse areas of study. Areas such as: electronics, computer systems and networks; communications; energy systems; computer-aided design; control systems, robotics and multimedia are only a few of the directions that Electrical Engineering students can choose after graduation. The program of study includes co-operative work terms for qualified students that are designed to enhance the knowledge and professionalism of the student.

The program of study encompasses courses outside Electrical Engineering and provides a professional education sufficiently fundamental in nature so as to allow the student to choose his or her specific area of professional specialization after graduation. This philosophy of education recognizes that the professional responsibilities of graduate engineers evolve throughout their careers. Student may select courses from the list of electives during the fourth year so as to meet their needs more effectively.

Graduates of this program are able to engage, from the outset of their career, in decision making with a much broader perspective than is possible when excessive specialization at the undergraduate level is permitted. The program of study also provides excellent preparation for those students who may wish to continue their formal education with graduate study and research.

Students must participate in a fourth-year team-based capstone design project that develops leadership skills and professionally maturity. Students are encouraged to participate in seminars and in other professional development activities as organized by the Department, as well as off-campus professional activities. The Institute of Electrical and Electronics Engineers (IEEE) has an active student chapter on campus which includes a Women in Engineering AffinityGroup (WIE).

Note: The baccalaureate degree program in Electrical Engineering is accredited by the Canadian Engineering Accreditation Board of the Canadian Council of Professional Engineers.

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ENGLISH LANGUAGE, LITERATURE, AND CREATIVE WRITING: PROGRAM REGULATIONS

No more than three 100-level English courses may be counted towards the Major requirements for a degree program in English.

Students are required to have completed 26-120, 26-210, and 26-211 by the end of second year, but are urged to take them in their first year.

26-260 will satisfy the Category C (Canadian literature) requirement even if it has already been used to satisfy a 200-level requirement. If 26-260 is used to satisfy both a 200-level requirement and the Category C requirement, the student must take one additional course to bring the total number of courses up to the required number for the degree program.

Requirements for all 300 level English Department courses: Semester three standing, and two of 26-120; 26-210 or 26-211.

**Some of our classes (26-203 and 26-498) are double-credit (6.0 credit) courses, and so take place over two consecutive semesters. The following single-credit courses have been replaced: 26-310, 26-312, 26-326, 26-327, 26-343, 26-344, 26-346, 26-347. These are marked with a double asterisk. They will no longer appear in the calendar as of the 2015-16 academic year.

CREATIVE WRITING COURSES AND PROGRAMS

Creative Writing courses are offered at the 200, 300, and 400 levels. All of the courses require workshop participation and provide the opportunity for individual writing conferences. Creative Writing courses are not available on an Audit basis.

The complete program for four-year Honours students in English Literature and Creative Writing features 26-203 in second year, 26-304 and one “practicum” course (26-302, 26-305, 26-306, 26-307, 26-309) in third or fourth year, and 26-498 in fourth year. However, students may enter the program at any point commensurate with their talent and experience. 26-203 and 26-498 are two-term (6.0 credits) courses.

Admission to all courses requires approval based on a portfolio. A portfolio is a sample of the student’s best work, ten to twenty-five pages depending on the course. The deadlines for portfolio submission are August 1st for Fall courses and December 1st for Winter courses. Students may access specific portfolio amounts and requirements from the English website.

Admission to the “practicum” courses 26-305, 26-306, 26-307 require approval based on an application form. Application forms are one page long and request background information on the student’s related experience (if any) in the practicum area along with a short (one paragraph) statement of intent for taking the course. Students may gain access to specific application formats on the English Department website.

Students not in the Creative Writing program may take any of the Creative Writing courses for credit towards the English Language and Literature minor, general, or four-year Honours degrees.

LANGUAGE AND LITERATURE PROGRAMS

Full-time General and Honours students begin their programs with 26-120 (a one-semester course normally taken in the Fall term) ., 26-210 (offered in the Fall term), and 26-211 (offered in the Winter term). Students are encouraged to complete their remaining 200-level course requirements by the end of their second year. Second-year students may begin 300-level courses in the winter term of second year (Semester 4 of their programs). Practicum courses may be taken in either third or fourth year. 400-level seminars are normally taken in fourth year.

Part-time students should consult an academic advisor regularly for assistance in planning an appropriate sequence of courses.

Admission to 26-305, 26-306, 26-307 requires approval based on an application form. Application forms are one page long and request background information on

the student's related experience (if any) in the practicum area along with a short (one paragraph) statement of intent for taking the course. Students may gain access to specific application formats on the English Department website.

COURSE CATEGORIES

Requirements for degree programs in English make reference to the following groups of courses:

Literature Courses at the 100- and 200-level: 26-120, 26-122, 26-123, 26-128, 26-140, 26-201, 26-202, 26-205, 26-210, 26-211, 26-260, 26-270.

Language and Theory Courses at the 200-level: 26-280, 26-285, 26-290, 26-291, 26-293.

Practicum Courses: 26-302, 26-305, 26-306, 26-307, 26-309.

*Creative Writing Courses:*26-203, 26-304, 26-498

Category A - Early British Literature: **26-310, **26-312, 26-314, 26-322, 26-323, 26-324, **26-326, **26-327, 26-328, 26-333, 26-334, 26-335, 26-336.

Category B - Later British Literature: **26-343, **26-344, **26-346, **26-347, 26-348, 26-349, 26-352, 26-353, 26-357.

Category C - Canadian Literature: 26-260, 26-361, 26-366, 26-367. (26-260 will simultaneously satisfy a 200-level requirement and satisfy a Category C requirement.)

Category D - American and World Literatures Written in English: 26-350, 26-354, 26-355, 26-356, 26-358, 26-359, 26-371, 26-372, 26-373, 26-374, 26-375.

Category E - Composition, Rhetoric, Linguistics, and Theory: 26-301, 26-383, 26-395, 26-397, 26-399.

400-level seminars: 26-411 to 26-420, 26-424, 26-498.

*Students may substitute one of the following for 26-280: 26-285, 26-301, 26-290, 26-354, or 26-383.

**Courses marked with a double asterisk -- 26-310, 26-312, 26-326, 26-327, 26-343, 26-344, 26-346, 26-347 -- have been replaced by double credit course 26-344. Students may not claim credit for equivalent single-semester courses *and* full-term courses in any particular area.

*Students may substitute one of the following for 26-280: 26-285, 26-301, 26-290, 26-354, or 26-383

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INDUSTRIAL AND MANUFACTURING SYSTEMS ENGINEERING

PROGRAM REGULATIONS AND INFORMATION

The Industrial and Manufacturing Systems Engineering (IMSE) program is unique and innovative. It provides students with a broad based curriculum of practical real world material that develops engineering skill for which demand exceeds supply in industry, manufacturing and business organizations world wide. Examples of manufacturing assignments held by our IMSE alumni include the areas of Product Engineering, Process Engineering, Plant / Facility Engineering, Tool Engineering, Industrial Engineering and Human Factors. Business organizations such as banks, railroads, petroleum, airlines, insurance companies, and hospitals are also employing our graduates to manage and improve performance of their operations. Our graduates are employed all over the world, in all levels of management and responsibilities. The department has a tradition of highly successful co-op internship education programs with local business and industry in Canada, the United States and the European Union. These activities expose students to applied aspects of their research progams and help them establish strong contacts with potential employers in relevant fields that include design and manufacturing at several local corporate headquarters such as Ford, General Motors, DaimlerChrysler, Toyota, Honda, VW Audi. The combination of real industry experience, cutting edge research and a curriculum that delivers the skill needed by employers provides exceptional value and our degree is valued by others. Enrollment in IMSE is competitive and the department welcomes new student applicants who have a drive to succeed and are prepared to be challenged to top performance.

Students may enrol in a general Industrial Engineering program or a Minor in Business Administration. The first and second years are common for all students registered in the Industrial Engineering program. The baccalaureate degree program in Industrial Engineering is accredited by the Canadian Engineering Accreditation Board of the Canadian Council of Professional Engineers.

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MECHANICAL, AUTOMOTIVE, AND MATERIALS ENGINEERING

PROGRAM INFORMATION

Students may take a regular program in Mechanical Engineering, or they may specialize in Engineering Materials or Automotive Engineering as described below.

The baccalaureate degree program in Mechanical Engineering is accredited by the Canadian Engineering Accreditation Board of the Canadian Council of Professional Engineers.Mechanical engineers are responsible for the design, construction, maintenance, and operation of machines and systems of machines. They create, plan, research, supervise, analyze, and generally act as the professionals of mechanical technology.

The mechanical engineer's knowledge and skills are needed in many industries, such as: heating, ventilating, and air conditioning; transportation; power generation and distribution; metal production and processing; manufacturing; and chemical and electrical equipment. Mechanical engineers commonly go beyond the limits of purely mechanical work. They are found at all levels of management in private industry and the public sector.

Students in the regular program specialize by selecting six elective courses. These courses may be selected from those offered in the areas of: air conditioning; dynamics and stress analysis; vibrations and noise; and gas dynamics and turbomachinery.

AUTOMOTIVE ENGINEERING

Students interested in the Automotive Option begin their specialization in the Summer term of their third year. The Option includes four required courses and two technical electives.

ENVIRONMENTAL ENGINEERING

Students interested in the Environmental Option begin their specialization in the Summer term of their third year. The Option includes five required courses and one technical elective.

ENGINEERING MATERIALS

Students interested in the Engineering Materials Option begin their specialized studies in the Summer term of their third year. The Option includes a series of four required and two elective courses. Engineering Materials courses include modern developments in such areas as steels, casting, polymers, environmental degradation and novel processing techniques.

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SCHOOL OF CREATIVE ARTS

MUSIC PROGRAM REGULATIONS
1) Advanced Standing Examinations: Upon admission to a Music program a student may petition to write advanced standing examinations in 32-112, 32-113, 32-212, 32-213, 32-222, 32-223, 32-322, 32-323, and 33-111.
2) Program Approval: B.Mus., B.A. Combined Four-Year Honours students must have their programs approved by an advisor prior to registration. All applications for graduation will be subject to approval and such approval will be granted only when the academic program completed is identical with that previously approved by the academic advisor in consultation with the student.
3) Keyboard Proficiency Requirement: Keyboard skill is a valuable tool for learning in all aspects of music, and also an important asset for all careers in music. Students in the B.Mus. program are required to demonstrate this skill by meeting the keyboard proficiency requirement set by Music. The requirement includes playing scales, chords, and arpeggios; sight reading a four-part chorale; and playing a prepared composition of approximately Grade 6 Conservatory level. The requirement must be met before students in the B.Mus program register for any Music course beyond their second term. Instruction is offered in the lab portion of Theory I and II (32-112 and 32-113).
4) Recital Attendance Policy: Attendance at a significant number of live musical performances will broaden a student's musical experience and thus enhance and contribute to the potential for academic success. Therefore, a Recital Attendance Policy has been developed, embracing outside music events in addition to recitals and special events offered internally. This policy applies to all full-time students in the B.Mus programs during each year of registration. Details for the current academic year (i.e., number of concerts and other events to be attended) are announced during the first week of classes in September.

AREAS OF STUDY
Requirements for programs in Music make reference to the following groups of courses:

Areas of Study-Academic
History and Literature (Musicology): 32-107, 32-116, 32-126, 32-127, 32-227, 32-236, 32-246, 32-247, 32-317, 32-326, 32-327, 32-346, 32-426, 32-427, 32-436, 32-437, 32-447, 32-494.
Theory and Composition: 32-102, 32-112, 32-113, 32-212, 32-213, 32-222, 32-223, 32-232, 32-322, 32-323, 32-332, 32-342, 32-343, 32-412, 32-413, 32-432,
Methods and Pedagogy (Music Education): 32-239, 32-248, 32-249, 32-255, 32-269, 32-279, 32-285, 32-458, 32-459, 32-484, 32-485.

Areas of Study-Performance
Performance Studies: 33-111, 33-213
Ensembles: 33-210, 33-220, 33-230, 33-240, 33-260, 33-270, 33-310, 33-330.

Performance Instruction - For Music Students in Professional degree programs (Bachelor of Music)
The following courses offer performance instruction either as a 3.00 credit hour course (1-hour lesson a week) or 1.50 credit hour course (half-hour lesson a week). Course requirements include a fifteen-minute examination before a faculty jury at the end of each term of study, as well as the attainment of the appropriate Level of Achievement. When required, a major recital may substitute for the jury examination. Students should consult the Music Office for specific details regarding curricula for these examinations.

These courses are available to Bachelor of Music students with the approval of a program advisor in Music. These students will elect their major instrument at the time of their admission.

Students who have completed four semesters of study in courses 33-347 – 33-369 and/or 33-317 - 33-339 may complete their degree requirements in private lesson study by enrolling in courses 33-371 or 33-341 (Jazz/Pop). Students may also be required to audition for courses 33-371 and 33-341 prior to completing four semesters of study in courses 33-347 – 33-369 and/or 33-317 - 33-339. Please contact the Music Office for details regarding regulations and registration.

Performance courses are intended to be taken in consecutive semesters. Any

interruption in study must be followed by an audition for re-entry into the performance course sequence. The audition will be scheduled in consultation with the Performance Area Chair at the beginning of the semester.

Private instruction courses may be repeated for credit.

3.00 Credit Course	1.50 Credit Course	Instrument
33-347	33-317	Voice
33-348	33-318	Piano
33-349	33-319	Organ
33-351	33-321	Harpsichord
33-352	33-322	Flute
33-353	33-323	Oboe
33-354	33-324	Clarinet
33-355	33-325	Saxophone
33-356	33-326	Bassoon
33-357	33-327	French Horn
33-358	33-328	Trumpet
33-359	33-329	Trombone
33-361	33-331	Euphonium
33-362	33-332	Tuba
33-363	33-333	Violin
33-364	33-334	Viola
33-365	33-335	Cello
33-366	33-336	Double Bass
33-367	33-337	Percussion
33-368	33-338	Harp
33-369	33-339	Classical Guitar
33-371	33-341	Applied Jazz/Pop

Performance Instruction - For Music Students in Non-professional degree programs (BA in Music or Combined BA in Music) and for non-Music Students

The following courses offer performance instruction within the format of a group master class. As part of this course, students may take optional weekly private lessons for which there is a private lesson fee. Course requirements include a performance examination before a faculty jury at the end of each term of study, as well as the achievement of the appropriate Level of Achievement. Students should consult the Music Office for specific details regarding curricula for these examinations.

It is the responsibility of the student to arrange for a qualifying audition by contacting the Music Office no later than the end of the first week of classes. Students who fail to do so will relinquish their right to attend such classes and must complete the normal procedure for dropping a course as outlined on the Student Information System. The audition for entry to these courses is equivalent to that for the 33-300 performance series. Private instruction courses are intended to be taken in consecutive semesters. Any interruption in study must be followed by an audition for re-entry in to the performance course sequence. The audition will be scheduled in consultation with the Performance Area Chair at the beginning of the semester.

Bachelor of Music or Bachelor of Music Therapy students may also opt to take Performance Instruction courses in any secondary instrument/voice of their choice, classical or jazz/pop. These courses involve the 33-200 performance series and may be taken in addition to, not in replacement for the required 33-300 performance series. The courses may not be taken by Bachelor of Music or Bachelor of Music Therapy students to meet the specific degree requirements in Performance Studies.

Applied instruction courses may be repeated for credit.

3.00 Credit Course	Instrument
33-247	Voice
33-248	Piano

33-249	Organ
33-251	Harpsichord
33-252	Flute
33-253	Oboe
33-254	Clarinet
33-255	Saxophone
33-256	Bassoon
33-257	French Horn
33-258	Trumpet
33-259	Trombone
33-261	Euphonium
33-262	Tuba
33-263	Violin
33-264	Viola
33-265	Cello
33-266	Double Bass
33-267	Percussion
33-268	Harp
33-269	Guitar
33-271	Applied Jazz/Pop

Fall 2015 Undergraduate Calendar

Foreword/Glossary

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CALENDARS (Undergraduate & Graduate)

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Main University Secretariat

SCHOOL OF CREATIVE ARTS

VISUAL ARTS - ADDITIONAL PROGRAM INFORMATION

Visual Arts General Information
Transfer Students: Students who have taken art courses at other post-secondary institutions and desire credit for basic courses in Visual Arts may be required to submit a portfolio of their own work for evaluation by Visual Arts, together with an official transcript of their record and catalogues describing the courses taken, all of which must be submitted no later than two weeks before the first day of classes.

Visual Arts Program Requirements
1) 28-150 must be taken in the first year.
2) Visual Arts students must take 27-105, 27-106, 27-107, and 27-108 in the first year.
3) Registration in any studio courses numbered in the 27-200's requires a successful B.F.A. portfolio evaluation.
4) Fourth-year B.F.A. students will be required to participate in the B.F.A. Candidates' Exhibit. The selection of work to be exhibited is to be made with the approval of the student's instructor in
Studio Practice II.

Visual Arts and the Built Environment
Note: Students admitted to the BFA in Visual Arts and the Built Environment (VABE) program are also required to apply for a US study visa in consultation with the University of Detroit Mercy (UDM), in order to attend and complete courses at the UDM School of Architecture. Admission to the VABE program does not guarantee the granting of a study visa by the US government. Continuation in the VABE program requires that a study visa is granted by the US government.

Areas of Study
Requirements for degree programs in Visual Arts make reference to the following groups of courses:
Basic Courses: 27-105, 27-106, 27-107, 27-108, and Art History 28-150, 28-214 and 28-215.
Critical Issues: 27-491
Digital Media: 27-245, 27-345, 27-365.
Drawing: 27-203, 27-303, 27-365.
Inter-media Practices: 27-383, 27-384
Internship: 27-380
Painting: 27-213, 27-313, 27-365.
Photography: 27-253, 27-353, 27-365
Printmaking: 27-223, 27-326, 27-365.
Sculpture: 27-233, 27-333, 27-365.
Seminar: 27-490.
Studio Practice I: 27-480
Studio Practice II: 27-481
Time-Based: 27-243, 27-343, 27-365