

**Course Outline and Syllabus**  
**Animal Cells and Tissues**  
**BIOL 3571**  
**F2021**

**Course Description:**

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:** BIOL-2111 and BIOM-2131

**Instructor:** Dr. Anna Kozarova  
kozarova@uwindsor.ca

**Lecture Times and Place:**

Monday and Wednesday: 13:00 – 14:20

Due to COVID-19 completed synchronously online via Blackboard

**Lab Times and Place:**

Wednesday and Thursday: 14:30 – 17:20 and 18:30 – 21:20

Due to COVID-19 completed synchronously online via Blackboard

**Graduate teaching assistants:**

Experienced microscopists, Zeenat and Hasan, currently conducting research in chemosensory systems.

**Lab sections and graduate teaching assistants:**

**Section 51:** Wednesday 14:30 – 17:20 Hasan Polat, polath@uwindsor.ca

**Section 52:** Wednesday 18:30 – 21:20 Zeenat Aurangzeb, aurangz@uwindsor.ca

**Section 53:** Thursday 14:30 – 17:20 Hasan Polat, polath@uwindsor.ca

**Section 54:** Thursday 18:30 – 21:20 Zeenat Aurangzeb, aurangz@uwindsor.ca

**You must attend the lab section you registered for on the UWinsite Student system**

**Office hours:**

Thursday: 10:00-12:00

Available to be contacted virtually by the “call” option on TEAMS

**E-mail correspondence:**

e-mails will be generally answered within 24-hr period during regular weekdays

**Resources:**

**Course Textbook:** Color Atlas and Text of Histology Ed:7 by Leslie P. Gartner (recommended, not required)

**E-mail and Blackboard:** active uwindsor e-mail and Blackboard access are required

**Course, Lectures, Midterms and Labs:**

This course empowers you to learn about how cells and groups of cells organize so that organs and organ systems function. Above all, this course focuses on the use of microscopy as a tool for understanding the organization of the cells, the material outside the cells (extracellular material), and how these integrate in the various organs and the organ systems to ultimately perform the body’s functions. The goal of this course is to form a basis of understanding of the animal body for further study of physiological and biochemical applications. We will also learn about the power of visual examination, and how this strategy can be applied to the understanding of integrated functions.

This course is based on instructor delivered lectures and weekly virtual labs. Many components of this course rely on and are driven by your own self-directed learning.

Some assignments are performed in a team environment, while others are on an individual basis.

Material presented in lectures is based on various textbooks, web pages and published original research articles and review papers. Midterms and Final exam might contain multiple choice/multiple answers, fill-in-the-blank, true/false and/or short answer/essay type of questions and all will be delivered virtually through Blackboard. The final exam is cumulative and is to be completed virtually at the assigned time scheduled by the registrar’s office.

**Grade Distribution:**

Final mark is based on a percentage scale with the breakdown as follows:

**Lab component:**

Lab Assignment (to be uploaded at the end of lab period)	10%
Lab Quizzes (5 in total)	10%
Pre-Lab Assignment (multiple submissions, see Blackboard)	23%
Participation during virtual lab sections (in-class engagement, contribution to meaningful discussions, willingness to participate)	2%

**Lecture component:**

Pubmed Assignment (see Blackboard for detail)	10%
Midterm 1 (October 18, 2021)	10%
Midterm 2 (November 15, 2021)	10%
Final exam	20%
In-class participation (uploaded individual work during class times, professionalism, in-class spot quizzes)	5%

**Important Dates:**

**First Class:** September 13, 2021

**Reading Week:** October 9 – October 17, 2021

**Last Day to Withdraw:** December 6, 2021

**Last Day of Classes:** December 8, 2021

**Final Exam Period:** December 11 – December 22, 2021 (including December 12, excluding December 19)

**Student Evaluation of Teaching:**

The Student Evaluation of Teaching (SET) will be accessible on-line the last two weeks of classes in accordance to University of Windsor Senate Policy on Student evaluation of teaching (SET) and mandatory administration of SET.

**Policy Links:**

[Multiple Final Examinations in One Calendar Day Click here for the form \(Click here for the form\)](#)

[Conflict with Religious Conviction Click here for the form \(Click here for the form\)](#)

[Conduct of Exams and Tests](#)

[Student Code of Conduct](#) and [Academic Integrity](#)

[Academic Evaluation Procedures](#)

**Missed Exams policy:**

If you are unable to complete midterm/exam due to medical reasons, please contact the instructor by e-mail at [kozarova@uwindsor.ca](mailto:kozarova@uwindsor.ca) at your earliest convenience. Alternative make-up exam (midterm/final exam) will be scheduled. Any make-up midterm/exam may be composed of different questions than the scheduled examination. University of Windsor policies and procedures regarding missed midterm/final exam will be followed.

**Course Policy on Regrade:**

Every attempt will be made to grade exams and assignments completely and fairly; however, mistakes do occur. You have **one week after your exam** is returned to apply for a re-grade. No appeals will be considered after the one-week time limit. All requests for a re-grade **must be in writing by e-mail**. If you find a math error, this also must be brought to my attention within the one-week time limit but does not require a written request.

**Plagiarism detection software:**

All submitted student work will be subjected to plagiarism detection software (for example SafeAssign available through Blackboard) to detect plagiarism. For detailed information see University of Windsor, Senate Policy on Plagiarism-Detection Software ([http://www.uwindsor.ca/secretariat/sites/uwindsor.ca.secretariat/files/policy\\_on\\_plagiarism-detection\\_softwareamended\\_sa151211.pdf](http://www.uwindsor.ca/secretariat/sites/uwindsor.ca.secretariat/files/policy_on_plagiarism-detection_softwareamended_sa151211.pdf)). Any concerns should be e-mailed directly to the instructor ([kozarova@uwindsor.ca](mailto:kozarova@uwindsor.ca)) the beginning of the semester.

**Plagiarism and Academic Dishonesty:**

Plagiarism and other forms of Academic Dishonesty will not be tolerated and all instances will be reported to the Associate Dean of Science for disciplinary action under Senate Bylaw 31: Academic Integrity.

Since lectures/midterms/labs/assignments and all other course related materials are protected by copyright, reproduction or dissemination of their contents or format is strictly prohibited. Students who violate this rule or engage in any other form of academic dishonesty will be subject to disciplinary action.

**Academic Evaluations Procedures:**

The University of Windsor uses a percentage marking and grading scale. For further details, consult Senate Bylaw 54: Undergraduate Academic Evaluation Procedures.

**Special needs, Disability Services:**

Student Accessibility Services provides a variety of services and support for all academically qualified students who may have disabilities. If you have, or think may have a disability, you may wish to contact Student Accessibility Services by phone (519-253-3000 extension 3288) or by e-mail (sas@uwindsor.ca).

**Course Policy on Group Work:**

All midterms, the final exam and lab assignments are to be completed by the individual student and not as a collaborative work effort.

All course related work is to be completed on-line in a virtual environment.

**Please Note:**

1. In general, you should complete readings and understand the material presented in class prior to attending the virtual lab. You can only attend the timeslot you registered for on the UWinsite Student system.
2. In order to approximate your virtual lab experience to the one you would have obtained prior to COVID pandemic in an actual lab setting, we ask you to complete all the sketches by hand on an actual sheet of paper. Once completed, please use your phone and take a picture of your work. You will need to upload your completed lab assignment onto Blackboard before the end of your lab time. Pay attention to quality of your picture and detail in your figures, as your mark will depend on the image you provide to your GAs. Screen shots of web pages and digital files are not acceptable, as these are not your own work!
3. The Blackboard is your main source of information related to this course. Lectures will be delivered synchronously during scheduled class time. Your attendance and participation are paramount to your success in this course.
4. Check the Blackboard class web regularly and frequently. If you have any course-related questions you can e-mail the instructor directly (at kozarova@uwindsor.ca).
5. Working professionally and efficiently in virtual space as a part of a team is a must these days. Take this opportunity to prepare yourself for your future professional career and work diligently on your own and as part of your lab group.
6. If you ask to have a question/section re-marked, the entire assignment or exam shall be re-marked and you must contact the instructor/GA within one week of receiving your mark.