

**UNIVERSITY OF WINDSOR**  
**UNIVERSITY PROGRAM REVIEW (UPR)**  
**REPORT ON: General Science**  
**UNDERGRADUATE PROGRAM**  
January 2019

**EXECUTIVE SUMMARY**

**Review Preparation**

In preparing this document, the Program Development Committee reviewed the following: General Science’s Self-Study (SS) (2017), the report of the external reviewers (ER) (May 2018), the response from the Associate Dean, Undergraduate Affairs (AD) (July 2018), and the response from the Dean (DR) (July 2018) to the above material. The external reviewers were: Dr. Marlee M. Spafford, Associate Dean of Science, Undergraduate Studies, University of Waterloo, Dr. Ben Li, Associate Dean of Science, Undergraduate Studies (Programs), University of Manitoba, and Dr. Lori Buchanan, Department of Psychology, University of Windsor.

**Undergraduate Programs**

This review focusses on the Bachelor of Science in General Science, which is a three-year general degree program, administered through the Office of the Dean of Science.

A Concurrent BSc in General Science/Bachelor Education is also available.

**Enrolments**

**Undergraduate\***

	<b>Fall 2014</b>	<b>Fall 2015</b>	<b>Fall 2016</b>	<b>Fall 2017</b>	<b>Fall 2018</b>
<b>Full-Time</b>	99	104	102	109	109
<b>Part-Time</b>	93	99	62	74	71

*\*Enrolment numbers for the General Science program are split 60/40 between Biology and Chemistry.*

**Human Resources**

Housed in the Office of the Dean of the Faculty of Science, student advising and administration of the General Science program rests with the Associate Dean Undergraduate Affairs and the Academic and Student Affairs Secretary. The Secretary to the Associate Dean also provides support for the General Science programs.

The degree requirements for the General Science program consist of existing courses offered by the departments in the Faculty of Science for their programs.

**FINAL ASSESSMENT REPORT (with Implementation Plan)**

**Significant Strengths of the Programs**

“The strength of this program lies in its flexibility that allows graduation with a university degree for a wide variety of students [with a wide variety of needs and interests]: from students who wish to graduate early to go to a professional school or for financial reasons, to students interested in education who wish to combine it with a BEd, to students who transfer into it because of poor performance in another program, to students who have a range of interests” or who wish to test different science disciplines prior to declaring a major. (SS p.91, ER, p.3). The recent introduction of the Service Learning course, the Undergraduate Research Experience course, and the Internship course, offered through the Dean’s office and open to all students in the Faculty, enables General Science students to avail themselves of additional high impact practice and experiential learning opportunities. (SS, p.91, ER, p. 6)

Because of its interdisciplinary nature, the General Science program is taught by faculty members from Departments across the Faculty of Science, many of whom hold “impressive teaching and research awards”. (ER., p.5, p.6)

## **Opportunities for Program Improvement/Enhancements**

The strength of the program (noted above) is also an impediment in that it makes it harder to manage it and results in lower than average retention and graduation rates because of the fluidity of students entering and transferring out of the General Science, and because of its use as a fallback degree for students who are struggling in their chosen major, or use it “as a spring board to honours BSc programs”. (ER, p.4, p.6) In light of this, the external reviewers emphasized, above all else, the need for a more evidenced-based approach to recruitment and retention. (ER, p.4, p.7) Proposed new certificate programs in Science and new student engagement initiatives may draw in General Science students and assist in building a sense of cohort.

These and other opportunities for program improvements are captured in the recommendations listed below.

## **IMPLEMENTATION PLAN**

### **Recommendations (in priority order)**

*(Final recommendations arrived at by the Program Development Committee, following a review and assessment of the External Reviewers report, the Associate Dean-Undergraduate Affairs response, and the Dean’s response.)*

**Recommendation 1:** That Science engage in curricular planning and mapping for its General Science programs that clearly correspond to the program-level learning outcomes.

*[Science has submitted learning outcomes to Senate for each its General Science programs.]*

**Agents:** Associate Dean, CTL

**Completion by:** Fall 2020

**Recommendation 2:** That Science make the General Science program learning outcomes more transparent to students (e.g., publish on an appropriate webpage).

**Agents:** Associate Dean

**Completion by:** Fall 2020

**Recommendation 3:** That Science:

- a) collect and review more program-specific data (e.g., entry into and progress through the programs; different General Science program sub-cohorts - direct entry; involuntary entry; domestic versus key international cohort data; institutional surveys like NSSE, OUGS and CUSC and program exit survey data); and
- b) establish the recruitment and retention priorities for the General Science and Concurrent General Science/Bachelor of Education programs through greater program-specific data analysis.

**Agents:** Associate Dean

**Completion by:** Fall 2020

**Recommendation 4:** That Science determine where and how improvements in the General Science student experience can be made, including whether there is widespread interest in program-specific study space, online course offerings, and other appropriate initiatives, subject to departmental capacity. This information may be obtained through, for example, focus groups or exit surveys.

**Agents:** Associate Dean

**Completion by:** Fall 2020