

**BIOLOGY 4200B Course Outline – Final form**  
**Seminar course/special topics – Biology in the Public Square!**

**1. Course Information**

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Biology 4200B (seminar course) / Special Topics in Biology Winter 2025

**List of Prerequisites**

RESTRICTED TO YR 4 HSP MODULES OFFERED BY DEPT OF BIOLOGY (INCL INTEG SCI W BIO). STUDENTS REGISTERED IN HSP IN ENVIRONMENTAL SCIENCE MAY CONTACT DEPT OF BIO FOR PERMISSION.

Prerequisite(s): Completion of at least 1.5 Biology courses at the 3000 level or above and registration in Year 4 of an Honours Specialization module offered by the Department of Biology.

Unless you have either the requisites for this course or written special permission from your Dean's Designate (Department/Program Counsellors and Science Academic Advisors) to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

**2. Instructor Information**

Instructors	Email	Office	Office Hours
Dr. Kathleen Hill (Course Coordinator)	khill22@uwo.ca	WSC333	<ol style="list-style-type: none"> <li>1. Friday mornings [20 min break time within each class]</li> <li>2. Discussion in Brightspace is monitored weekdays 9 am to 5pm for rapid response to course content questions</li> </ol>

Students must use their Western (@uwo.ca) email addresses when contacting their instructors.

**Additional help with course materials:** Course content questions can be directed to the course Brightspace site Discussion board. Questions related to grading and individual student progress are to be emailed to [khill22@uwo.ca](mailto:khill22@uwo.ca). Response time is typically within 24 hours on weekdays.

**Office hours:** There will be an intentional break of 20 min within the middle of the three-hour lecture period each Friday for office hours. That time is intentionally set aside to be used for asking questions about the course.

**3. Course Syllabus, Schedule, Delivery Mode**

This course provides diverse opportunities to think about biology—and science in general—from a societal perspective: what does biology have to say about matters of

societal import? How does society learn of, understand and react to biological matters?  
How does society influence what biologists do?

### **Rationale & Outline**

Doing biology, as any human activity, involves choices, and choices are inherently value laden. Deciding which questions in biological research are worthy of time and resources requires that choices be made whether by individuals or by granting bodies. Choices must then be made about how to frame questions and philosophers assure us that frameworks can influence what we find out. We also must decide what constitute good and useful answers and what purposes those answers are presumed to serve. All these elements in the actual conduct of science are thus influenced by values outside the science itself.

Biological findings intersect with larger society in numerous ways, and wherever they do so further choices get made; thus whether and how well the media communicate any biological finding, the interest that society pays, and the uses it decides to make of them are political too. Given all this, it is not surprising that many aspects of the biological enterprise are controversial —What does it mean? Is it important? What use can we put it to? Should we use it? —representing conflicting attitudes and values of the various segments of society.

In this course we will be seeking to learn about **Biology in the Public Square**. We will be investigating what discoveries in biological research are in the news, in classrooms, in government legislatures, in courts of law. We will discover what aspects of current research in biology are newsworthy and actively discussed in our society. We will be noting where misunderstanding, conflict, debate and dialog are active in our society. We will note how governments are working on policies and legislation associated with discoveries in biology. We will take controversies, debates and issues from our current culture and bring them into our classroom for research, discussion and debate.

We will engage with a group of researchers from the department of Biology at Western to learn of the controversial and challenging aspects of their research that are current issue with high public awareness, dialog and debate.

**Sample topics:** Global Warming, Environmental Sustainability and Climate Change; Trophy Hunting and Conservation Biology; Synthetic Biology and Dual Purpose Research; Implicit Bias; Academic/Research Misconduct; Biobanking; Genetic Testing; Genome Sequencing; Science & Media; Science Communication, Wicked Problems in Biology and Gate Keepers.

**Course content:** Each Friday class is a combination of lecture, workshop and/or student presentations.

### **Course Description published in the Western Academic Calendar:**

This course will enable students to reflect on the biological consequences of human activities for the biotic world. Human beings and their institutions will be considered. Direct physical and chemical effects upon metabolism, development, adaptation, genes, and population structure will be investigated. Indirect effects assessed will include climate change, population density, social conditions and changed patterns of survival.

### **Course-level learning outcomes:**

**At the conclusion of this course students will be able to**

- to deliver a short oral presentation
- to design and deliver slide presentations

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- to perform a systematic literature review
- to perform data analytics and interpret scientific data
- to prepare effective Powerpoint slide presentations
- to understand, discuss and debate current hot topics in Biology
- to write and speak effectively
- to write Letters to the Editor, Science News Briefs
- to perform research for Debates, Letters to the Editor, News briefs and Critical Appraisals
- to write an outline for a Critical Appraisal
- to work effectively in a team
- to deliver effective Debates
- to be able to present both sides in a Debate
- to perform effective searches in Pubmed, Web of Science and reputable internet sources
- to use Zotero for creating a literature database, citing literature and preparing a reference list

### **Key Sessional Dates:**

Classes begin: January 6, 2025

Spring Reading Week: February 17 – 21, 2025

Classes end: April 4, 2025

Exam period: April 7 – 30, 2025 [NO EXAM IN THIS COURSE]

### **GENERAL SESSIONAL DATES: Winter Term**

Jan. 6 Classes resume

Jan. 9 First day December SPC Exams can be held (On or after the 1st Thursday in January following the beginning of classes)

Jan. 14 Last day to add a second-term half course or drop a course without showing WDN

Feb. 17–21 Spring Reading Week (including Family Day)

Mar. 30 Last day to withdraw from a second-term half course without academic penalty

Apr. 4 Last day of classes in the Winter term

Apr. 5-6 Study Days

Apr. 7-30 April examination period

Apr. 18, 20 Good Friday and Easter Sunday

May 7 First day April SPC Exams can be held (On or after the 5th business day in May following the April exam period)

### **Contingency plan**

Although the intent is for this course to be delivered in person, should any university-declared emergency require some or all of the course to be delivered online, either synchronously or asynchronously, the course will adapt accordingly. The grading scheme will **not** change. Any assessments affected will be conducted online as determined by the course instructor.

### **4. Course Materials**

- This course requires in-class use of your student laptop computer for electronic submission of workshop materials and class assignments during class time.
- There is no textbook for this course.
- Course materials related to workshops and assignments will be provided through the course Brightspace.

- Course reading materials will be provided through the course Brightspace

Students are responsible for checking the course Brightspace OWL site (<http://owl.uwo.ca>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class. This site will be used in class as well.

All course materials will be posted to OWL: <http://owl.uwo.ca>.

If students need assistance with the course OWL site, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

### **Technical Requirements**

The course does rely on your student laptop, stable internet connection for the in-person course delivery. A computer with working microphone and/or webcam is required as part of the contingency plan.

## **5. Methods of Evaluation**

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### **The overall course grade will be calculated as listed below:**

Letter to the Editor	10%	Date: January 31 [written]
News Brief	10%	Date: January 31 [written]
Historical Report	15%	Date: February [oral presentation]
Team Debate 1	20%	Date: February [oral presentation]
Team Debate 2	25%	Date: March [oral presentation]
<i>Course Engagement</i>	<i>20%</i>	

*Engagement:* - accumulated over the term

(this evaluation is a combination of attendance, participation in class workshops, participation in debate discussions, participation in debate evaluations, posing of questions in class, providing constructive feedback to debate teams, engaging in discussion with guest lecturers, engaging with activities presented by the guest lecturers. The participation will be evaluated for depth of understanding and the comprehension shown of the course materials and workshops.

**It is a requirement of this course that students attend all classes in person.**

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*There are no midterm or final tests/exams in this course.*

### **Course-specific conditions that are required to pass the course.**

**In-person attendance is required for all classes given that evaluations of course engagement and in class presentations all occur in each class.** Also, multiple course components are group activities where *team members are reliant upon all team members to be present.*

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- Attendance ensures that students demonstrate sufficient mastery of the technical skills and learning objectives
- A passing grade on the oral presentations is required given the ‘seminar’ nature of the course and critical learning objective of oral presentation skills.

**\*\*\*The consequences of missing two or more Friday classes without approved academic consideration is to receive a failing grade in the course [academic consideration will require approved documentation submitted through the Student Absence Portal].\*\*\***

If a critical course component is missed and there is approved documentation and approved academic consideration, the course component will be completed in the last class [this applies to oral presentations]. However, for logistical reasons, it is permissible the opportunity to complete that component is in the next offering of the course, in which case the student will receive a grade of Incomplete (INC) and their maximum course load may be reduced during the term in which they complete their course requirements.

## 6. Student Absences

### UPDATE WITH NEW ACADEMIC CONSIDERATION POLICY EFFECTIVE SEPT 2024

This course has participation requirements and **multiple small assignments** in such a way as to allow students some **flexibility**. Note that the written assignments have due dates with **48-hour flexibility** prior to the start of the late penalty [the late penalty is the loss of 1% of the total course grade per 24 hour period that the assignment is late].

If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below.

#### General information about missed coursework

Students must familiarize themselves with the University Policy on Academic Consideration – Undergraduate Students in First Entry Programs posted on the Academic Calendar: [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/academic\\_consideration\\_Sep24.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf),

This policy does not apply to requests for Academic Consideration submitted for attempted or completed work, whether online or in person.

The policy also does not apply to students experiencing longer-term impacts on their academic responsibilities. These students should consult Accessible Education.

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar’s webpage: [https://registrar.uwo.ca/academics/academic\\_considerations/](https://registrar.uwo.ca/academics/academic_considerations/)

All requests for Academic Consideration must be made within 48 hours after the assessment date or submission deadline, using the [Student Absence Portal](#).

All Academic Consideration requests normally must include supporting documentation; however, recognizing that formal documentation may not be available in some extenuating circumstances, the policy allows students to make one Academic Consideration request without supporting documentation in this course. However, the following assessments are excluded from this, and therefore always require formal supporting documentation:

- Supporting documentation is always required for Debate #2; for all others, they may use their one undocumented absence

When a student mistakenly submits their one allowed Academic Consideration request without supporting documentation for the assessments listed above or those in the Coursework with Assessment Flexibility section below, the request cannot be recalled and reapplied. This privilege is forfeited.

For further information, please consult the University's medical illness policy at

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/academic\\_consideration.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration.pdf).

The Student Medical Certificate is available at

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

**For the written assignments**, if accommodation is for a period exceeding one week, an alternate date will be assigned [an extension will be applied] for those cases with approved academic consideration and approved documentation.

**For the oral presentation assignments**, academic accommodation will require approved documentation. For missed delivery of Debate 1, the Debate 2 grade will be reweighted accordingly. For the case of missed delivery of Debate 2, the presentation the student would have made as part of that debate will be made in the last class. **Team debates will continue even if a team member is not able to attend. Teams will work on contingency planning for the case of an unexpected missing member on the day of the debate. Contingency planning strategies will be discussed in class prior to the debate days.**

**Note:** missed work can *only* be excused through one of the mechanisms above. Being asked not to attend an in-person course requirement due to potential COVID-19 symptoms is **not** sufficient on its own.

## 7. Accommodation and Accessibility

### Religious Accommodation

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request an accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Advising office of their Faculty of Registration. Please visit the Diversity Calendars posted on our university's EDID website for the recognized religious holidays:

<https://www.edi.uwo.ca>.

### **Accommodation Policies**

Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/Academic\\_Accommodation\\_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf).

### **8. Academic Policies**

The website for Registrarial Services is <https://www.registrar.uwo.ca/>.

In accordance with policy,

[https://www.uwo.ca/univsec/pdf/policies\\_procedures/section1/mapp113.pdf](https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf),

the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

**Scholastic offences** are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf).

[TURNITIN] All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

### **9. Support Services**

Please visit the Science & Basic Medical Sciences Academic Advising webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: <https://www.uwo.ca/sci/advising/>

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

[https://www.uwo.ca/health/student\\_support/survivor\\_support/get-help.html](https://www.uwo.ca/health/student_support/survivor_support/get-help.html).

To connect with a case manager or set up an appointment, please contact [support@uwo.ca](mailto:support@uwo.ca).

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Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

[http://academicsupport.uwo.ca/accessible\\_education/index.html](http://academicsupport.uwo.ca/accessible_education/index.html)

if you have any questions regarding accommodations.

Learning-skills counsellors at Learning Development and Success (<https://learning.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: <https://www.uwo.ca/se/digital/>.

Additional student-run support services are offered by the USC, <https://westernusc.ca/services/>.