

## 1. Course Information

### Course Information

Environmental Biology (Biology 2485B) Winter 2022

Lectures: Tuesdays and Thursdays 1:30-2:30pm in AHB 1R40\*

Tutorials: 002 and 008: 11:30am-1:30pm in STVH 1153\*

003 and 009: 2:30-4:30pm in PAB 106\*

004 and 010: 11:30am-1:30pm in SSC 3006\*

005 and 011: 2:30-4:30pm in PAB 106\*

006 and 012: 11:30am-1:30pm in STV 2166\*

007 and 013: 2:30-4:30pm in UCC 54B\*

\*Both lectures and tutorials will begin the year online, and will move into the designated classroom space once in-person learning resumes

### List of Prerequisites

Either Biology 1001A or Biology 1201A, and either Biology 1002B or Biology 1202B, or Integrated Science 1001X

Unless you have either the requisites for this course or written special permission from your Dean 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

Dr. Tim Hain ([thain@uwo.ca](mailto:thain@uwo.ca)); Office in NCB 301F

Office hour: after class on Tuesdays and Thursdays, either on Zoom or in my office.

For office hours, please make an effort to attend in the first half hour; if no one is present I may leave the meeting.

Please include "Biology 2485B" in the subject line of any emails addressed to your instructor or to your teaching assistants.

## 3. Course Syllabus, Schedule, Delivery Mode

Basic principles of environmental biology, human ecology, ecosystem structure and function. Human population growth and its impact on soil, water, energy, agriculture and natural populations of plants and animals. Environmental problems created by resource exploitation and possible solutions.

Further to the goals of the course listed below, outcomes for each lecture will be released with the lecture.

By the end of this course, you should be able to:

1. To develop a basic scientific understanding of important current environmental issues from a biological point of view. In this course you will hear, read about and discuss some of the most important environmental topics of our time, including: Human population growth, Ecosystems, Biodiversity, Water resources, Energy resources
2. To understand and summarize articles from the scientific literature on environmental biology.
3. To produce recordings of PowerPoint presentations that can be viewed at any time.

## Mode of delivery

Until January 31: Online, synchronous over Zoom. Lectures will be recorded and posted to the course website. Tutorials will be conducted over Zoom as well.

After January 31: to be determined. If the university allows in-person instruction, lectures will be held in-person in AHB 1R40, and tutorials will move to their designated rooms.

## Online Participation and Engagement

- Students are expected to participate and engage with content as much as possible
- Students can post on OWL after watching the recording
- Students can also participate by interacting in the forums with their peers and instructors

The lecture topics presented below are *tentative* and may change as the semester develops. There will be periodic readings in support of the lecture material from the course textbook. All readings can be seen in the supplementary Course Readings section.

<b>Week of:</b>	<b>Lecture Topics &amp; Exam Dates</b>	<b>Tutorial topic</b>
<b>Jan 10</b>	Introduction, Valuing environmental processes	None
<b>Jan 17</b>	Human population growth, Terrestrial environments	None
<b>Jan 24</b>	Terrestrial diversity, Marine environments	Introduction to Tutorial (002-007)
<b>Jan 31</b>	Marine diversity, Atmospheric processes	Introduction to Tutorial (008-013)
<b>Feb 7</b>	Atmospheric pollution, Global climate change processes I	#1 Diversity (002-007)
<b>Feb 14</b>	Global climate change processes II; Climate change consequences I	#1 Diversity (008-013)
<b>February 21 – Reading Week</b>		
<b>Feb 28</b>	Global climate change consequences II, Conventional energy resources I <b>Midterm: Saturday, March 5, 2021, 7:00-10:00PM</b>	#2 Climate change (002-007)
<b>Mar 7</b>	Conventional energy resources II, Alternative energy resources I <b>Makeup Midterm: Thursday, March 10, 2021, 7:00-10:00PM</b>	#2 Climate change (008-013)
<b>Mar 14</b>	Alternative energy resources II; Soil resources	#3 Energy (002-007)
<b>Mar 21</b>	Green revolution; Parasites	#3 Energy (008-013)
<b>Mar 28</b>	Forestry; Mining	#4 Food, forestry, mining (002-007)
<b>April 4</b>	Freshwater resources, Course summary	#4 Food, forestry, mining (008-013)

Tutorials are every second week. Students in sections 002-007 will attend in the first week of a rotation, and students in sections 008-013 will attend in the second week of a rotation. You should attend the tutorial every week, even when you are not scheduled to present.

## 4. Course Materials

Text: J Withgott, M Laposata, B Murck. 2017. *Environment: the Science Behind the Stories*. Third Canadian Edition. Pearson Canada. Toronto, Canada.

An electronic version of the textbook can be ordered through the UWO bookstore. This text is recommended – nothing on the tests will be on material that was not covered in lecture, but you may appreciate having another learning resource available.

Students are required to buy Packback, which is a software package that will allow you to explore your curiosity on a subject. Five times throughout the semester, students are expected to post their thoughts on a subject that was discussed either in class or in a tutorial presentation. An invitation to join Packback will be sent to students' UWO email addresses on January 10. If you did not receive the email, please check your Spam filter, your trash. If you do not see it in either folder, then email your instructor.

Students should check OWL (<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. Students are responsible for checking OWL on a regular basis.

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

If students need assistance, 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.

### **Contingency plan for an in-person class pivoting to 100% online learning**

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction beyond January 31, the remaining course content will be delivered entirely online and synchronously (i.e., at the times indicated in the timetable). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor.

If the tests are conducted online, remote proctoring software (i.e. Proctortrack) will be used. Please see Section 9 for more details.

### **Technical Requirements**

A stable internet connection and a computer with a working webcam is required.

## 5. Methods of Evaluation

Reflection	Packback posts (5x throughout the semester, approximately every two weeks)	10%
Presentation	Each student will present once throughout the semester during their scheduled tutorial	20%
Midterm	March 5, 7:00pm, location TBA	35%
Final exam	Scheduled by the Registrar's Office	35%

Answers will be marked based on information presented by the instructor (Dr. Hain), guest lectures, and from assigned readings. No other sources should be used.

Attendance will be taken in tutorial. Consistently failing to attend the presentations of your classmates will result in a mark penalty of up to 5% of your course mark.

Late assignments without accommodations will be penalized 10% per day.

## 6. Student Absences

### Academic Consideration for Student Absences

Students who experience an extenuating circumstance (illness, injury or other extenuating circumstance) sufficiently significant to temporarily render them unable to meet academic requirements may submit a request for academic consideration through the following routes (**NOT through their course instructors**):

- (i) Submitting a Self-Reported Absence (SRA) form provided that the conditions for submission are met. To be eligible for a Self-Reported Absence:
  - an absence must be no more than 48 hours
  - the assessments must be worth no more than 30% of the student's final grade
  - no more than two SRAs may be submitted during the Fall/Winter term
- (ii) For medical absences, submitting a Student Medical Certificate (SMC) signed by a licensed medical or mental health practitioner to the Academic Counselling office of their Faculty of Registration.
- (iii) Submitting appropriate documentation for non-medical absences to the Academic Counselling office in their Faculty of Registration.

Note that in all cases, students are required to contact their instructors within 24 hours of the end of the period covered.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. **All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.**

For the policy on Academic Consideration for Student Absences – Undergraduate Students in First Entry Programs, see:

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

and for the Student Medical Certificate (SMC), see:

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

### **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 accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at

<https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>

### **Absences from Final Examinations**

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a “Multiple Exam Situation” (e.g., more than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under [Special Examinations](#)).

## **7. Land acknowledgment**

We acknowledge that Western University is located on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron peoples, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous peoples (e.g. First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors of our society.

## **8. Accommodation and Accessibility**

### **Accommodation Policies**

Students with disabilities work with Accessible Education (formerly SSD), 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)

## **9. Academic and Virtual Classroom Policies**

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

In accordance with policy, <http://www.uwo.ca/its/identity/activatenonstudent.html>, 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 his/her 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:

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

In the event that tests are conducted online, they will use the remote proctoring service Proctortrack.

Proctortrack will require you to provide personal information (including some biometric data). The session will be recorded. By taking this course, you are consenting to the use of this software.

More information about remote proctoring is available in the Online Proctoring Guidelines at the following link:

<https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>

Completion of this course will require you to have a reliable internet connection and a device that meets the system and technical requirements for Proctortrack. Information about the system and technical requirements are available at the following link:

<https://www.proctortrack.com/tech-requirements/>

I have elected to use remote proctoring in this course as a means for validating that students have met the learning outcomes of the course. Given the introductory nature of the learning outcomes tested, unproctored assessments such as term papers or take-home examinations, would not provide an adequate way to distinguish between answers provided by different students. Furthermore, this is a large class, and assigning alternative written assignments would require more marking resources than we have available. Use of online proctoring assures students that they can write assessments on equal terms with their classmates and signals to prospective employers, graduate supervisors, and professional schools that, despite the COVID-19 pandemic, Western has endeavoured to maintain the high standards that are at the core of our degrees.

### **Professionalism & Privacy:**

Western students are expected to follow the Student Code of Conduct. Additionally, the following expectations and professional conduct apply to this course:

- Students are expected to interact with their instructor and fellow students with courtesy and respect. The instructor will first issue a warning if he observes any behaviour that is or might be considered offensive. Subsequent infractions will result in a grade penalty. The warning will mention the extent of the penalty for a similar infraction.
- All course materials created by the instructor(s) are copyrighted and cannot be sold/shared
- Recordings are not permitted (audio or video) without explicit permission
- Permitted recordings are not to be distributed without explicit permission
- Students will be expected to take an academic integrity pledge before some assessments
- All recorded sessions will remain within the course site or unlisted if streamed

## 10. Support Services

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

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 Student Accessibility Services (SAS) at (519) 661-2147 if you have any questions regarding accommodations.

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/>.

Students who are in emotional/mental distress should refer to Mental Health@Western ([http://www.health.uwo.ca/mental\\_health](http://www.health.uwo.ca/mental_health)) for a complete list of options about how to obtain help.

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