

BIOLOGY 2483B – ECOLOGY

Summer 2026 Course Outline

1. Course Information

Course Instructor: Dr. Gabor Sass (gabor.sass@uwo.ca)

Office hours: Virtual appointment only

Mode of delivery: Online, asynchronous

Calendar description: An introduction to ecology, the scientific study of the interactions that determine the distribution and abundance of plants, animals, and microorganisms. Ecological concepts at the organism, population and ecosystem levels will be considered, including tolerance limits, life history evolution, competition, predation, population growth and control, and ecosystem dynamics.

List of Prerequisites: A minimum mark of 60% in either Biology 1001A or Biology 1201A and a minimum mark of 60% in either Biology 1002B or Biology 1202B or Integrated Science 1001X. Unless you have either the prerequisites 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. Course Objectives

This course introduces students to the science of ecology whose focus is the relationships between organisms and their living (biotic) and non-living (abiotic) environment. In addition to covering fundamental concepts about how life on Earth interacts with the environment, this course provides the foundation for 3000- and 4000-level courses in ecology and conservation biology. By the end of the course, students will be able to:

- describe and explain the ecological mechanisms and interactions that determine the distribution and abundance of organisms in the environment at the population, community, and ecosystem levels.
- explain ecological concepts within an evolutionary context.

3. Course Materials

Website: All course material will be posted to OWL Brightspace:

<https://westernu.brightspace.com/d2l/home>. Any changes will be indicated on the OWL site and discussed with the class. Current versions of all popular browsers (e.g., Safari, Chrome, Edge, Firefox) are supported with OWL Brightspace; what is most important is that

you keep your browser updated to ensure it is current. All JavaScript and cookies should be enabled. If students need assistance, they can seek support on the [OWL Brightspace Help page](#). Alternatively, they can contact the [Western Technology Services Helpdesk](#). They can be contacted by phone at 519-661-3800 or ext. 83800.

Proctortrack Access: In addition to materials listed below, completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. Information about the technical requirements for Proctortrack is available at: <https://www.proctortrack.com/tech-requirements/>.

SimBio Software: Supplemental learning exercises will be drawn from the software package from SimBio which is also used during the Fall/Winter terms in this course. This software is required for completion of the tutorials. The software can be purchased during the student registration process for \$46 USD with a credit card. Midterm and exam questions may be based on material presented in these sections. Your grade for each exercise will be calculated by both completion of feedback questions and graded questions. Additional information about software will be posted on the OWL website.

SimBio registration link: <https://www.simutextca2.com/student/register.html#/key/CN44-fKTW-Jeu6-DvJL-Nkta>. The access key is: CN44-fKTW-Jeu6-DvJL-Nkta

If you experience technical difficulty with SimBio software, Dr. Sass is unable to assist with this. You can submit a support request at: <http://simutext.zendesk.com>

Requests are monitored daily, including evenings and weekends.

Textbook: Lectures will draw on materials from the following excellent textbook:

- Bowman, W. & S. Hacker. 2020. *Ecology* (5th or 6th edition), Oxford University Press.

The main difference between the two editions is the digital resources (e.g. quiz questions for each chapter, etc) you get with the 6th edition. The ebook is significantly cheaper than the print copy although you can find the 5th edition paperback copies at a reasonable price on the internet. [The textbook is available on reserve from the UWO library](#). Midterm and exam questions will be drawn from material and examples in the textbook so its use is highly recommended. The highest chance of success in this course will require reading chapters in addition to simply watching lectures. Older editions of the textbook may be used, though some examples, figures, and chapter numbers differ.

Strong Internet Connection: A strong internet connection is **mandatory** for completion of this course. All exams, assignments, and lecture downloads will require a strong internet connection. Failure to have access to dependable internet is not considered a legitimate reason for not being able to complete exams or assignments.

4. Methods of Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated. This course is assessed *via* SimBio quizzes, assignments, a mid-term exam, and final exam. All

assessments, including exams, will be completed online. The mid-term and final exams are online, synchronous exams. Contributions to online Forums and Discussion posts are highly encouraged and help foster a sense of community in the online classroom.

Assessment	Format	Weight	Due Date
SimBio Tutorial Exercises	Multiple-choice answers	20%	Ex#1 June 21, Ex#2 June 28, Ex#3 July 12, Ex#4 July 19
Assignments	Short answers with graphics	10%	As#1 July 2, As#2 July 23
Mid-term exam	Mixed answers Synchronous online exam (2-hr)	35%	July 6 th , 10am – 12 pm
Final exam	Mixed answers Synchronous online exam (3-hr)	35%	TBA

The evaluation methods described in the course outline are essential requirements for the course. Students are responsible for material covered in the lectures as well as the assigned material in the **course textbook and SimBio text**.

- All assignments are due at 11:59 pm EST unless otherwise specified.
- Written assignments must be submitted through **Turnitin** (statement in policies below).
- Rubrics** will be used to evaluate assessments and will be posted with the instructions.
- After an assessment is returned, students should wait **24 hours** to digest feedback before contacting their evaluator; to ensure a timely response, reach out **within 7 days**.
- It is imperative that students read through the **detailed expectation documents** for the different assessment components listed above (see OWL “content” [**Week0**]).

4.1 SimBio Tutorial Exercises (20%):

On **weeks 1, 2, 4, and 5** there is an interactive SimBio tutorial exercise (see more about technical requirements above). These tutorials replace the **3-hour tutorials** that students do during the fall term, so you should be prepared to spend a few hours on each assignment. The four tutorials are worth a total of 20% (5% each). Each tutorial has a quiz at the end and your mark on that quiz (67%) plus a participatory component for non-graded questions (33%) will be your grade for the tutorial. These tutorials must be completed by **11:50pm Sunday** of the assigned week (see schedule below). Due to the short duration of the course, **there are no extensions to tutorial deadlines**. If you are unable to complete a tutorial due to a legitimate reason approved by Academic Counselling, the weight will be redistributed across other tutorials. Otherwise, a missed tutorial will receive a grade of **zero**.

4.2 Assignments (10%)

There are two short assignments during the semester (**weeks 3 and 6**). All assignments must be submitted by Thursday on the due date by 11:59pm. Assignments submitted after the deadline **without approved academic accommodation** will receive a grade of zero — no exceptions.

4.3 Exams (70%):

Exams in this course will be conducted using the remote proctoring service, Proctortrack. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. More information about this remote proctoring service is available in the Online Proctoring Guidelines at the following link:
https://registrar.uwo.ca/academics/examinations/remote_proctoring/using_proctortrack.html

A reliable internet connection and a compatible device are mandatory for completing this course.

More information is available in Western's Online Proctoring Guidelines and the technical requirements for Proctortrack.

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

Both the mid-term and the final exam will include a **mix of multiple choice and short answer questions**.

Midterm Exam. The mid-term is on Monday July 6th from 10:00am-12:00pm and is worth 35% of your final mark. The test will draw on the first 12 lectures (3 weeks of material) plus the SimBio exercises completed by that time. The test will be run online synchronously through Proctortrack on OWL. Further details will be posted on the OWL course website.

Final Exam. The final exam will be scheduled by the Registrar's Office during the July 27 to 30 exam period and the exact date will be announced after the beginning of term. It is worth 35% of your final mark. The test will draw on the material from the entire course, with a stronger emphasis on material from the second half of the course. Some questions will test your ability to integrate information from the first and second halves of the course. The test will be run online synchronously through Proctortrack on OWL. Further details will be posted on the OWL course website.

Click [here](#) for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements

D	50-59	Fair work, minimally acceptable
F	below 50	Fail

Information about late or missed evaluations (for exams please see section 6 below):

- Late assignments will receive a grade of zero.
- Once an assignment has been returned to the class, it cannot be submitted for grading.
- A make-up mid-term exam will not be offered [The weight of a missed exam will be transferred to the final exam.]

Grades will not be adjusted based on personal need or circumstances. It is your responsibility to monitor your performance through the course. Remember: *You are accountable for your own grades.*

5. Course Calendar

Summer 2026 Bio2483 Course Calendar			
Week	Day 1 Topics & Readings Monday	Day 2 Topics & Readings Wednesday	Assessments
Week 0 (June 8 – 14)	Welcome! Introductions and Course Expectations		Source Textbook & SimBio UText
Week 1 (June 15 – 21) Official Start	1. The Web of Life (<i>Ch. 1</i>) 2. The Physical Environment (<i>Ch. 2</i>)	3. Environmental Variation: Temperature & Water (<i>Ch. 4</i>) 4. Environmental Variation: Energy (<i>Ch. 5</i>)	Due by June 21: • SimBio Exercise 1: Physiological Ecology
Week 2 (June 22 - 28)	5. Ecology & Evolution (<i>Ch. 6</i>) 6. Life History (<i>Ch. 7</i>)	7. Behavioural Ecology (<i>Ch. 8</i>) 8. Population Distribution & Abundance (<i>Ch. 9</i>)	Due by June 28: • SimBio Exercise 2: Behavioural Ecology
Week 3 (June 29 – July 5)	9. Population Growth & Regulation (<i>Ch. 11</i>) 10. Population Dynamics (<i>Ch. 10</i>)	11. Predation & Herbivory (<i>Ch. 12</i>) 12. Competition (<i>Ch. 14</i>)	Due by July 2: • Assignment 1 Midterm: July 6 from 10am - 12pm
Week 4 (July 6 - 12)	13. Parasitism (<i>Ch. 13</i>) 14. Mutualism & Commensalism (<i>Ch. 15</i>)	15. Nature of Communities (<i>Ch. 16</i>) 16. Change in Communities (<i>Ch. 17</i>)	Due by July 12: • SimBio Exercise 3: Community Dynamics
Week 5 (July 13 - 19)	17. Biogeography (<i>Ch. 18</i>) 18. Species Diversity in Communities (<i>Ch. 19</i>)	19. Production (<i>Ch. 20</i>) 20. Energy Flow & Food Webs (<i>Ch. 21</i>)	Due by July 19: • SimBio Exercise 4: Biogeography

Week 6 (July 20 - 24)	21. Nutrient Supply & Cycling (<i>Ch. 22</i>) 22. Conservation Biology (<i>Ch. 23</i>)	23. Landscape Ecology (<i>Ch. 24</i>) 24. Global Biology (<i>Ch. 25</i>)	Due by July 23: • Assignment 2 Final exam: date TBA (July 27 - 30)
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6. Accommodation Policies

Students with disabilities should work with **Accessible Education** (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).

General Information about missed work:

University policy on academic considerations are described [here](#). This policy requires that all requests for academic considerations **must be accompanied by a self-attestation**.

Please note that any academic considerations granted in this course will be determined by the instructor, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline.

Absence from Course Commitments

Students must familiarize themselves with the [Policy on Academic Consideration – Undergraduate Students in First Entry Programs](#)

Students missing course work for medical, compassionate or extenuating circumstances can request academic consideration by completing a request at the central academic consideration portal. Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline. Supporting documentation for academic considerations for absences due to illness should use the [Student Medical Certificate](#) or, where that is not possible, equivalent documentation by a health care practitioner.

Accommodation for Religious Holidays

Students should review the policy for [Accommodation for Religious Holidays](#). Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but no later than two weeks before a scheduled examination or term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible **at least one week in advance**.

Make-up Examinations (offered only for final exam)

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is

registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents.

The format and content of make-ups may differ substantially from the scheduled test or examination.

If a student fails to write a scheduled Special Examination, permission to write another Special Examination will be granted only with the permission of the Dean in exceptional circumstances and with appropriate supporting documents. In such a case, the date of this Special Examination normally will be the scheduled date for the final exam the next time the course is offered and the maximum course load for that term reduced by the credit of the course(s) for which the final examination has been deferred. If permission for such a further deferral or other accommodation is not granted, a course grade based on an examination mark of zero (0) will be entered. You can find the actual policy [here](#).

7. Use of Electronic Devices

A strong internet connection is mandatory for completion of this course. All exams, assignments, and lecture downloads will require a strong internet connection. Failure to have access to dependable internet is not considered a legitimate reason for not being able to complete exams or assignments.

8. Use of Generative Artificial Intelligence (AI)

Students may **not** use generative AI tools during the development of written assignments. AI tools are not permitted during Simbio exercises or the exams.

9. Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence.

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>).

10. Western's Commitment to Accessibility

The Department of Biology strives at all times to provide accessibility to all faculty, staff, students and visitors in a way that respects the dignity and independence of people with disabilities.

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also

wish to contact Services for Students with Disabilities (SSD) at 519-661-2147 for any specific question regarding an accommodation. [Information regarding accommodation of exams](#) is available on the Registrar's website.

More information about "[Accessibility at Western](#)" is available on the university's website.

11. Mental Health

If you or someone you know is experiencing distress, there are several resources here at Western to assist you. Please visit Western's [Health and Wellness website](#) for more information on mental health resources.

12. Support Services

[Western's Support Services
Student Development Centre](#)

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

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.