

BIOB50 Syllabus, Fall 2017
Prof. Péter Molnár

Course description

BIOB50 provides an introduction to the main principles of ecology, the science of the interactions of organisms with each other and with their environment. The course covers community and population ecology, and provides an emphasis on how ecology relates to other areas of biology, and to contemporary human and environmental issues.

Course information

Instructor:

Dr. Péter Molnár

Office: SW567A

Office hours: Tuesdays 2-3pm, Thursdays 3-4pm, starting week 2.

Email: peter.molnar@utoronto.ca (please put BIOB50 in the subject line)

Phone: 416-208-2247

Teaching Assistants:

Stephanie Penk, sr.penk@mail.utoronto.ca

Juan Sebastian Vargas Soto, juan.vargassoto@mail.utoronto.ca

Rowshyra Castaneda, rowshyra.castaneda@mail.utoronto.ca

Course coordinator:

Jennifer Campbell, jacampbell@utsc.utoronto.ca

Office: SW421D, Office hours: TBA

Lecture times & location:

Tuesday & Thursday, 10-11am, Academic Centre (AC) 223.

See below for lecture schedule.

Tutorials:

Thursdays, 5-7pm, AC 223.

Note that the tutorial slot is shared with BIOB10 (Cell Biology) and BIOB34 (Animal Physiology). Tutorials will alternate between these three courses, so there is no overlap, allowing students to attend all tutorials even if they are registered in two or more of these courses.

See below for the BIOB50 tutorial schedule.

Textbook:

Bowman, W.D., Hacker, S.D., Cain, M.L. *Ecology – 4th edition*. Sinauer Associates, Inc.

Course resources

Course Website and Online Lectures: All lecture slides will be posted on Blackboard (portal.utoronto.ca) the evening before the lecture. Additional announcements may be made on Blackboard, as well, so please check the course website regularly.

Textbook: Lectures will be heavily based on the textbook (Bowman, W.D., Hacker, S.D., Cain, M.L. *Ecology – 4th edition*. Sinauer Associates, Inc), but also introduce some additional concepts that may not be covered in here. Students are responsible for knowing both the lecture material and the assigned textbook readings. Textbook readings will broadly follow the lecture outline below, with specific pages announced on the lecture slides.

Textbook website: Sinauer offers a website accompanying the textbook at <https://ecology4e.sinauer.com/>. Here, you will find chapter summaries, hands-on practice problems, flashcards for studying, additional readings and many other things. You are encouraged to use this resource for studying, but beware that you will also find additional material here that is not covered in this course.

Facilitated Study Groups (FSGs):

BIOB50 is supported by Facilitated Study Groups. These weekly study sessions are open to everyone in the class. Attendance is voluntary, but students who attend regularly often earn higher grades. If you have any questions, please ask your facilitator, or visit the FSG website at <http://ctl.utsc.utoronto.ca/home/fsg>. Your FSG coordinator is Fat Malazogu, fat.malazogu@mail.utoronto.ca

Blackboard Discussion Group:

A dedicated TA will answer conceptual questions regarding the lecture and textbook readings on an ongoing basis on a Blackboard Discussion Group available on the course website.

How to Get Help with the Course:

First, check this syllabus and the course website! You will find the answer to almost all procedural questions here. If you have a question that is not answered by either the syllabus or the course website, contact the course coordinator Jennifer Campbell (jacampbell@utsc.utoronto.ca), for all procedural questions. For conceptual questions regarding the lecture and course readings, make use of the Blackboard Discussion group and/or email either the TA or the instructor. The instructor will respond to all emails in a reasonably timely manner, Monday through Friday, but will not respond to questions where the answer is found in the syllabus. When emailing the instructor, **please use your UTOR email only** (as hotmail, gmail and other email providers are spam-filtered on a regular basis), and **please begin your subject line with “BIOB50: <subject>” to make sure emails are not overlooked.** It is the responsibility of the student to adhere to these instructions and make sure his or her email reaches the instructor.

Tentative Lecture Schedule

Date	Day	Lecture	Topic	Chapter
Sep 5	TU	1	Course introduction	
Sep 7	TH	2	Ecology as a science	1
Sep 12	TU	3	Organisms and their environment	2-3
Sep 14	TH	4	Coping with environmental variation	4
Sep 19	TU	5	It's all about energy	5
Sep 21	TH	6	Life history	7
Sep 26	TU	7	Populations I	9-11
Sep 28	TH	8	Populations II	9-11
Oct 3	TU	9	Populations III	9-11
Oct 5	TH	10	Competition I	12
Oct. 9-14	Reading week			
Oct 17	TU	11	Competition II	12
Oct 19	TH	12	Predation & Herbivory	13
Oct 24	TU	13	Parasitism I	14
Oct 26	TH	14	Parasitism II	14
Oct 31	TU	15	Mutualism & Commensalism	15
Nov 2	TH	16	Communities	16
Nov 7	TU	17	Change in communities	17
Nov 9	TH	18	Species diversity in communities / Niches	19
Nov 14	TU	19	Biogeography	18
Nov 16	TH	20	Production & nutrient cycling	20, 22
Nov 21	TU	21	Food webs	21
Nov 23	TH	22	Landscape ecology & Conservation Biology	23-24
Nov 28	TU	23	Global Change (excluding climate change)	25, NA
Nov 30	TH	24	Climate Change	25, NA

* NA = additional readings from the primary literature will be provided

Tutorial Schedule for BIOB50

Date	Day	Topic
Sep 7	TH	Integrative Research Poster Project (introductory meeting)
Sep 14	TH	Integrative Research Poster Project (group meeting and group dynamics workshop)
Oct 5	TH	Review of mathematical models and other difficult concepts discussed in the lectures thus far. You are encouraged to submit specific questions to the instructor ahead of the tutorial for discussion during the tutorial.
Nov 2	TH	Review of mathematical models and other difficult concepts discussed in the lectures thus far. You are encouraged to submit specific questions to the instructor ahead of the tutorial for discussion during the tutorial.
Nov 16	TH	Integrative Research Poster Project (Poster presentation rehearsal and feedback)
Nov 23	TH	Integrative Research Poster Project (Poster Presentation Day, <i>from 5-9pm</i>)

Evaluation

There will be one midterm and one final exam, with the dates to be arranged by the Registrar's Office and announced as soon as they are known. There will also be an Integrative Research Poster Project highlighting connections between the B-level courses this fall, BIOB10, BIOB34, BIOB50

Marks breakdown:

Integrative Research Poster Project	10%
Midterm exam	40%
Final exam	50%

Midterm & Final, details:

Both exams will aim to test your knowledge regarding the topics covered in the lecture and assigned course readings, as well as your ability to think critically and apply the learned concepts to novel situations and problems. As such, both tests will be a combination of multiple choice questions and short answer questions. Sample exam questions will be provided in the the tutorials. The final exam will cover all materials discussed throughout the course, but will place heavy emphasis on the materials covered since the midterm.

Missed exams:

Students who miss the midterm exam for reasons entirely beyond their control may, within three (3) days of the missed test, submit a written request for special consideration to the course coordinator (Jennifer Campbell), explaining the reasons for missing the test and attaching appropriate documentation, i.e. the official University of Toronto medical certificate (<http://www.illnessverification.utoronto.ca/>). If it is then determined that you had a valid reason for missing the midterm, you will be permitted to write a make-up midterm exam (usually within 1-2 weeks of the missed exam).

If you miss the final exam, you must contact the UTSC's Registrar's Office with appropriate documentation to request a deferred exam. For details and deadlines for this, refer to <http://www.utsc.utoronto.ca/registrar/deferred-exams> and <http://www.utsc.utoronto.ca/registrar/missing-examination>.

Integrative Research Poster Project:

This project is a research project that integrates concepts across one or more of the B-level Biology courses (i.e. BIOB10, BIOB34, BIOB50), and culminates in a poster presentation to your peers. The details of this project are outlined in a separate syllabus posted on Blackboard, and will be discussed in the Tutorial session held on Thursday, September 7, 5-7pm.

AccessAbility

Everyone is a welcome member of this class, and we strive to provide an equal playing field for students with diverse learning styles and needs. In particular, if you have a disability/health consideration that may require accommodations, please contact the AccessAbility office as soon as possible. They will provide confidential services that include flexible, personalized solutions for test-taking, note-taking, and similar issues. The AccessAbility office is located in SW302 and can be reached at: (416) 287-7560 or ability@utsc.utoronto.ca

Academic Integrity

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's *Code of Behaviour on Academic Matters* (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

- using someone else's ideas or words in their own work without appropriate acknowledgment.
- including false, misleading or concocted citations in your work.
- obtaining unauthorized assistance on any assignment.

- providing unauthorized assistance to another student. This includes showing another student completed work.
- submitting your own work for credit in more than one course without the permission of the instructor
- falsifying or altering any documentation required by the University. This includes, but is not limited to, doctor's notes.
- using or possessing an unauthorized aid in any test or exam.

The learning environment is built on mutual trust, and we will assume that all students operate with honesty and integrity. However, in the rare cases of substantial evidence that the University of Toronto's Code of Behaviour on Academic Matters (Section B; <http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) has been compromised, I will enact the procedures outlined in the Code of Behaviour on Academic Matters. First, I will invite you to discuss the possible offence through an email invitation. If our discussion leads me to believe that you have not compromised the code, then the matter will be dropped. If either you fail to respond to two requests for this discussion or new evidence comes to light, then a formal investigation will be initiated, and a penalty according to the U of T's guidelines on sanctions will be put into place.

Audio/video recordings

All lectures will be available via WebOption on the course website for your convenience. This is intended to help you revisit lectures and tutorials on your own time, but note that for reasons of privacy as well as for protection of copyright, the further dissemination of these materials beyond the course website (such as postings on other websites), as well as any other unauthorized audio or video recordings, are strictly prohibited.