

**BIOB50: Ecology
Fall 2013**

Course information

Lecture times:

Tuesday & Thursday, 10-11am

Location:

Academic Centre (AC) 223

Tutorial:

Thursday, 5-7pm, AC-223 (every third week)

Textbook:

Cain, M.L., Bowman, W.D. and Hacker, S.D. *Ecology -2 edition*. Sinauer Associates, Inc. Paper and e-book options available!

Exams:

1 midterm and 1 final

Midterm 1: TBA

Final: TBA

Project:

Ecology-news assignment

Professor:

Marc Cadotte

Office: Science Wing 542

Office hours: Tuesdays 11-12pm

Email: mcadotte@utsc.utoronto.ca (please put BIOB50 in the subject line)

Phone: 416-208-5105

Teaching Assistants:

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Course description

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.

Ecology is the interdisciplinary scientific study of the interactions between organisms and the interactions of these organisms with their environment. A conceptual understanding of ecology is found in the broader details of study, including:

- * life processes explaining adaptations
- * distribution and abundance of organisms
- * the flux of materials and energy through living communities
- * the successional development of ecosystems, and
- * the abundance and distribution of biodiversity in context of the environment.

Course Resources

Course Website and Online Lectures: Lecture notes (PDF copies of the powerpoint slides) will be posted on Blackboard by noon the day before the lecture. You should familiarize yourself with Blackboard and its contents, as check it regularly.

Textbook: Cain, M.L., Bowman, W.D. and Hacker, S.D. (2011) *Ecology 2nd Edition*. Sinauer Associates, Inc. Paper and e-book options available! This book will be used heavily in forming lectures and students are responsible for understanding concepts in lecture by understanding chapter material.

Tutorial: #1: TA present on picking a news topic and finding ecology papers, #2: population growth and simple competition models; time to discuss paper projects, #3: Ecology-News assignment due, review semester material.

How to Get Help with the Course. [First, check this syllabus](#); you will find the answer to almost all procedural questions here. If you have a question that cannot be answered by this syllabus, check the course website, which will be consistently updated with answers to many conceptual and procedural questions. If this does not answer your question, then decide if the question is conceptual or procedural. Conceptual questions are best answered by the TAs or the professor's office hours. If you have other questions, feel free to email either TA or the professor. The professor will return your email in a reasonably timely fashion Monday through Friday, but the fastest way to find your answer will be the FAQ.

Course Requirements/Marking

Exams. (35,50)

Ecology-news assignment (15)

Missed Exams. According to University policy, you may miss one of the exams if you are unable to take the regularly scheduled exam for a number of legitimate reasons. If we determine that you have a good reason, then your final exam mark will be expanded to cover your missed course mark (i.e., your final exam will be worth 60% of your final mark). You will need to obtain verifiable documentation of the reason for missing the exam, and contact the TAs or Professor immediately. Unless the reason for missing the exam is an unforeseen emergency that occurs within 24 hours of the midterm, then you must notify us more than 24 hours before the start of the midterm in order to be eligible for the altered marking scheme. In the case of a same-day emergency, you must submit an official U of T medical certificate. If you must miss the final exam, then you will need to contact the UTSC Registrar's Office, as we are not authorized to handle changes to the final exam schedule.

Accessibility

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. Please contact the AccessAbility office as soon as possible if you need any form of accommodation. They will provide confidential services that include flexible, personalized solutions for test-taking, note-taking, and the like. The AccessAbility office is located in SW302 and can be emailed at: ability@utsc.utoronto.ca

Academic Integrity

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, then 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.

Date	Day	Lecture	Topic	Chapters	
03-Sep	T	1	What is ecology	1	tt1
05-Sep	TH	2	Ecology as science	1	tt1
10-Sep	T	3	Organisms and their environment	2-3	tt1
12-Sep	TH	4	Its all about energy	5,19	tt1
17-Sep	T	5	Its all about energy	5,19	tt1
19-Sep	TH	6	Life-history	7	tt1
24-Sep	T	7	Population I	8-10	tt1
26-Sep	TH	8	Population II	8-10	tt1
01-Oct	T	9	Competition I	11	tt1
03-Oct	TH	10	Competition II	11	tt1
08-Oct	T	11	Predation	12	F
10-Oct	TH	12	Parasitism	13	F
15-Oct			Reading week		
17-Oct			Reading week		
22-Oct	T	13	Mutualism	12	F
24-Oct	TH	14	Communities	15	F
29-Oct	T	15	Community change	16	F
31-Oct	TH	16	Food webs	18	F
05-Nov	T	17	Metapopulations & metacommunities	NA	F
07-Nov	TH	18	Diversity -Niches	18	F
12-Nov	T	19	Neutral theory and Landscapes	23	F
14-Nov	TH	20	Measuring diversity	NA	F
19-Nov	T	21	Range sizes		F
21-Nov	TH	22	Biodiversity & ecosystem function	NA	F
26-Nov	T	23	Biogeography	17	F
28-Nov	TH	24	Conservation biology		22 F