

**BIOB50: Ecology  
Fall 2014**

**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:*

2 midterms and 1 final

*Midterm 1: TBA*

*Midterm 2: TBA*

*Final: TBA*

*Instructor:* Dr. Rajit Patankar

*Office location:* SW563B

*Office hours:* Tuesdays -- TBA

*Email:* [rajit.patankar@utoronto.ca](mailto:rajit.patankar@utoronto.ca) (please put BIOB50 in the subject line)

*Teaching Assistants:*

Nicholas Mirotnick, [nicholas.mirotnick@utoronto.ca](mailto:nicholas.mirotnick@utoronto.ca)

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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 2<sup>nd</sup> 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. (30, 30, 40)

**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](mailto: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	TEST/EXAM
02-Sep	T	1	What is ecology	1	TT1
<b>04-Sep</b>	TH	2	Ecology as science	1	TT1
09-Sep	T	3	Organisms and their environment	2-3	TT1
11-Sep	TH	4	Its all about energy	5,19	TT1
16-Sep	T	5	Its all about energy	5,19	TT1
18-Sep	TH	6	Life-history	7	TT1
23-Sep	T	7	Population I	8-10	TT1
<b>25-Sep</b>	TH	8	Population II	8-10	TT1
30-Sep	T	9	Competition I	11	TT2
02-Oct	TH	10	Competition II	11	TT2
07-Oct	T	11	Predation	12	TT2
09-Oct	TH	12	Parasitism	13	TT2
14-Oct			Reading week		
16-Oct			Reading week		
21-Oct	T	13	Mutualism	12	TT2
23-Oct	TH	14	Communities	15	TT2
28-Oct	T	15	Community change	16	TT2
30-Oct	TH	16	Food webs	18	TT2
04-Nov	T	17	Metapopulations & metacommunities	NA	F
<b>06-Nov</b>	TH	18	Diversity -Niches	18	F
11-Nov	T	19	Neutral theory and Landscapes	23	F
13-Nov	TH	20	Measuring diversity	NA	F
18-Nov	T	21	Range sizes		F
20-Nov	TH	22	Biodiversity & ecosystem function	NA	F
25-Nov	T	23	Biogeography	17	F
<b>27-Nov</b>	TH	24	Conservation biology	22	F