# BIOB50: Ecology Summer 2015

### **Course information**

Lecture times:

Wednesdays 2 - 4 pm, May 6 -August 4, 2015.

No class Reading Week, June 17.

Location:

SW128

Tutorial:

Wednesday, 4 -5 pm, SW128 (every third week)

*Textbook:* 

Cain, M.L., Bowman, W.D. and Hacker, S.D. *Ecology -3rd edition*. Sinauer Associates, Inc. Paper and e-book options available!

Exams:

Midterm: 40% Final exam: 50%

Project:

Ecology-news assignment: 10%

Professor:

Dr. Robin Marushia *Office:* Science Wing 563B

Office hours: Wednesdays 10 am – 12 pm

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

*Phone:* none (sessional office) – please use email.

Teaching Assistants:

Andrew Masson, andrew.masson@mail.utoronto.ca

# **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 3rd 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. The textbook offers an online Companion Website that is free, you may find it useful for studying.

#### Tutorial:

#1: TA present on picking a news topic and finding ecology papers,

#2: Ecological modelling (probably population growth and simple competition models); time to discuss & approve 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. Conceptual questions are best answered by the TAs or the professor's office hours; some simple conceptual questions can be answered by email. 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.

### **Course Requirements/Marking**

Midterm: 40% Final Exam: 50%

Ecology-news assignment: 10%

### **Marking policies:**

- Late assignments are docked 10% each day they are late, up to 5 days (including weekends), after which they are not accepted.
- A make-up exam is allowed only with a UTSC Health Centre doctor's note. In the event of significant illness or other event which prevents you from taking the midterm, you must inform Dr. Marushia within **3 days** and provide the UTSC doctor's note (for illness) or other convincing documentation (TBD) within 1 week. Students with valid reasons for missing the midterm will be given a new make-up exam (NOT the same exam as given to the class) to cover the first portion of the course.
- The final exam is NOT comprehensive, and will test material from the midterm to the end of term. The final exam will be held in the examination period. Anyone absent from the final exam must petition the registrar's office to take a deferred exam.

#### Turnitin.com

We will be using Turnitin.com for the Ecology News Assignment. You are expected to submit a digitial copy of your assignment to Turnitin.com and a hard copy to be marked by your TA. The following statement is included for your information as per University policy:

"Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site."

You should have only one account for all of your University of Toronto coursework. It should be the same Turnitin.com account that you created for BIOA01 and used for BIOA02.

### **Classroom Policies:**

- 1) Please refrain from using your cell phone during class.
- 2) As advanced students, participation and respectful behaviour are expected. *Please minimize distractions and give your instructors and fellow students your full attention*.
- 3) Some materials will be provided online as lecture notes these are intended to facilitate note-taking and enable learning during lectures, not to replace attendance to lecture.

## **Academic Honesty Policy:**

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

(<a href="http://www.governingcouncil.utoronto.ca/policies/behaveac.htm">http://www.governingcouncil.utoronto.ca/policies/behaveac.htm</a>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment.

On tests and exams:

- Using or possessing unauthorized aids.
- Looking at someone else's answers during an exam or test.
- Misrepresenting your identity.

In academic work:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from Dr. Marushia or from other institutional resources (see <a href="http://www.utoronto.ca/academicintegrity/">http://www.utoronto.ca/academicintegrity/</a>).

## **AccessAbility Statement**

Students with diverse learning styles and needs are welcome in this course! In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. I will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff (located in SW302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca.

Date	Lecture	Topic	Chapters	Exam
6-May	1	What is ecology?	1	Midterm
6-May	1	Ecology as science	1	Midterm
13-May	2	Organisms and their environment	2-5, 22	Midterm
13-May	2	Organisms and their environment	2-5, 22	Midterm
20-May	5	It's all about energy	5,20,21	Midterm
20-May	6	Life-history	7	Midterm
27-May	7	Population I	9-11	Midterm
27-May	8	Population II	9-11	Midterm
3-Jun	9	Competition I	12	Midterm
3-Jun	10	Competition II	12	Midterm
10-Jun	11	Predation	13	Midterm (?)
10-Jun	12	Parasitism	14	Midterm (?)
17-Jun		Reading week		
24-Jun	13	Mutualism	15	Final
24-Jun	14	Behavioural Ecology	8	Final
1-Jul	15	Communities	16	Final
1-Jul	16	Community change	17	Final
8-Jul	17	Diversity - Niches	19	Final
8-Jul	18	Measuring diversity	NA	Final
15-Jul	19	Biological Invasions	23	Final
15-Jul	20	Food webs	21	Final
22-Jul	21	Landscape Ecology	24	Final
22-Jul	22	Biodiversity & Ecosystem Function	24	Final
29-Jul	23	Biogeography	18	Final
29-Jul	24	Conservation biology	23	Final