ADVANCED POPULATION ECOLOGY
BioC59

Instructor:	Dr. Rudy Boonstra
Office:	S543
Phone:	287-7419
Lecture Room:	MW262 - Tuesday 9-11
Laboratory/Seminar:	SW242 - Wednesday 8-11 (one exception 8-13)
Office Hours:	Tuesday 11-12
T.A.	Sophia Lavergne
Office Hours:	Immediately following the Lab

Prerequisites: BioB50 Exclusion: EEB319H, (BGYC59H3), (BIO319H)

Course Text: C.J. Krebs 2009 Ecology: **The Experimental Analysis of Distribution and Abundance.** Benjamin Cummings; Chapters 1-17: Parts 1 to 3

Email Policy: ***Do not send emails.*** Contact should be during office hours or in the lecture/lab

Marking Scheme: Exams: Midterm - 25%**;** Final - 30%; Essay - 10% & Essay Seminar - 5%; Laboratory Assignments - 25%**;** Participation- 5%

Course Homepage: Available through UTSC homepage, upper right: Blackboard Portal. All communication will be done via this mechanism. Check it weekly and more often near due dates for assignments. Lecture slides, data files, essay writing tools, news items, etc. will be posted.

Announcements: It is YOUR responsibility to be aware of announcements made in class. Be sure to CHECK the homepage on lecture days to read the announcements.

Readings: Textbook Chapters that should be read in support of lecture material are outlined on the course schedule. You should ensure that you UNDERSTAND everything you read and can follow the examples given. For exams, concentrate on learning material presented in lectures and related material in your text. I recommend you do the readings weekly as this is the best way to ensure you understand the material. Work through examples at end of the chapters.
To succeed in this course, you should KNOW the lecture material and be sure you UNDERSTAND the TEXT and readings.

Exams: Each exam will consist of definitions of basic concepts, short answer, and 2-3 essays. The latter require you to synthesize concepts from the lecture/text and support them examples from the lecture/text. When I discuss techniques, make sure you understand and can apply them. Material for the midterm will include all lecture material to that point. The final will be comprehensive, but stress the new lectures (2/3s) and key concepts that integrate material.

Essay and Seminar: All topics must be cleared with me. See the handout specifically on this assignment. The essay will be **due on 23 March** ***(no exceptions! 10% per day late penalty)*** and the seminars will be presented on 23 and 30 March (half the class presenting each time).

Assignments: All assignments (essay and lab reports) must be handed in as paper copies.

Lecture Schedule (tentative)

5 January	Definitions and scope of the field (Krebs chapters 1-3)
	Regulation of Population Size (part of Krebs chapter 14)
12 January -	Population Demography and Growth (Krebs 8)
19 January	Population Growth (Krebs 9)
26 January	Species Interactions: Competition (Krebs 10)
2 February	Species Interactions: Competition (Krebs 10) & Predation (Krebs 11)
9 February	Species Interactions: Predation (Krebs 11)
16 February	Reading Week
23 February	MidTerm Exam
1 March	Regulation of Population Size (Krebs 14)
	Analyzing Geographic Distributions (Krebs 4)
8 March	Factors That Limit Distribution I: Biotic (Krebs 5)
15 March	Factors That Limit Distribution II: Abiotic (Krebs 6)
22 March	Relationship between Distribution and Abundance (Krebs 7)
29 March	Applied Problems: Pest Control (Krebs 16)

Tentative Lab Schedule

6 January	No lab
13 January	Field trip: Vegetation Lab 8 am to 1 pm
20 January	Goldenrod Lab: weighing of specimens, data input
27 January	Vegetation Lab: data input and analysis
3 February	**Goldenrod Lab Due,**
	Small Mammal trap Set up
10 February	No Lab
17 February	Reading Week
24 February	Small mammal trapping
2 March	**Vegetation Lab Due**
	Small mammal trapping, discussion of data and assignment
9 March	no lab
16 March	**Small Mammal Lab Due:** How to Present a Seminar session
23 March	Seminar Presentations (half the class)
30 March	Seminar Presentations (other half of the class)