AMBROSE UNIVERSITY COLLEGE | FACULTY OF ARTS & SCIENCE

Biology 213 – Introduction to Ecology and Evolution

Tentative Course Outline and Schedule for fall semester, 2010.

Prerequisites: Biology 131 and 133.

Times: **Lectures:** Tuesdays / Thursdays, 9:45-11:00, A2145
Labs: Mondays, 12:00 pm

Instructor : Dr. Carol A. Gibbons Kroeker
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Texts : Ecology Concepts and Applications – Canadian Edition, 2008, by Molles and Cahill. McGraw-Hill,

This class will cover the introductory concepts of ecology and evolution, such as biomes, population dynamics and growth, evolution, and species interactions.

Learning Objectives:

1. Students will gain a greater understanding of the evolution principles that shape determine phylogeny and be able to discuss the evolutionary history, biological diversity and modern relationships between species
2. Students will learn and apply the principles of population genetics, natural selection, predation, competition, and those of symbiotic relationships
3. Students will learn the principles of ecology that determine population growth and communities
4. Students will collaborate with peers in a laboratory setting

Mark Distribution :	2 Midterm Exams	(in class)	40%
	Lab reports / quizzes		20%
	Final Exam (set by registrar)		40%

This course consists of 3 hours of lectures per week, plus a 3-hour lab.

The midterm and final exam will be a combination of multiple choice questions, as well as short and long answer questions. While most questions will be based on lecture material, the textbook reading will absolutely help in the understanding of this material. Attendance at lectures will help ensure success on course exams and assignments.

Dates	**Topic**	**Text Chapters**
Week of		
Sept. 7	Introduction to Biology 213 / Life on Land	1, 2
Sept. 14	Life on Water	3
Sept. 21	Temperature and Water relations	5, 6
Sept. 28	Energy and Nutrient relations	7
Oct. 5	Population Genetics / Evolution	4
Oct. 12	Evolution / Midterm I	4
Oct. 19	Behavioural Ecology / Life Histories	8/9
Oct. 26	Population Growth and Dynamics	10, 11
Nov. 2	Population Growth / Dynamics	11,12
Nov. 9	Competition / Midterm II	13
Nov. 16	Predation	14
Nov. 23	Parisitism / Mutualism	15
Nov. 30	Communities	16,17
Dec. 7	Review	

Laboratory Schedule

Attendance at the laboratory sessions is COMPULSORY. Any lab missed without a valid excuse cannot be made up. A valid excuse (such as illness, death in the family etc.) must be validated by written proof from a doctor or counselor. Lab coats are not required but recommended for some labs. Labs will begin the week of Sept, 13.

Lab Topics will include:

Sept.	Biomes – land (field labs)
	Biomes –water (field labs)
	Statistics – describing a population
October	Sampling Populations (field lab)
	Estimating population size (field lab)
	Evolution – Natural Selection models
	Population distribution / Niches
November	Population Growth
	Competition
	Optimal Foraging Theory
	Predation / parisitism
December	Mutualism

Grading Scheme

A+	97-100%		C+	67-69%	
A	93-96%	Excellent	C	63-66%	Satisfactory
A-	89-93%		C-	60-62%	
B+	83-89%		D+	54-59%	
B	77-82%	Good	D	50-53%	Minimal Pass
B-	70-76%		F	Below 50%	Fail

Important Notes/Dates:

The last day to enter a course without permission and /or voluntary withdrawal from a course without financial penalty – Friday, September 17, 2010

The last day to voluntarily withdraw from a course or change to audit without academic penalty – Friday, November 12, 2010

Please note that final grades will be available on your student portal. Printed grade sheets are no longer mailed out.

Classroom Etiquette:
It is expected that students will take an active role in the learning process. This includes: (a) regular class attendance, (b) reading course material in advance of class, and (c) engaging in discussions during class.

In respect to the professor and to your fellow students, we ask that you:

a) Turn your phone off during class and that you don't use it for texting during lecture or lab
b) Not have conversations with the people beside your during lecture – it is very distracting to the people around you
c) Use your laptops for lecture material and assignments only – that you are not using the internet or facebook during class time.
d) Arrive to lecture and lab on time
e) Don't come to class or lab with your ipod or equivalent.

These will help to maximize the learning experience for you and your fellow students (and will keep your professor in a good mood).

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Student Handbook and Academic Calendar. Personal information, that is information about an individual that may be used to identify that individual, may be collected as a requirement as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Academic dishonesty is taken seriously at Ambrose University College as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to give credit to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from Ambrose. Students are expected to be familiar with the policy statements in the current academic calendar and the student handbook that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar and the Student Handbook that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean.