

School of Arts & Science

BIOL 124 Evolution and Diversity Summer 2007

COURSE OUTLINE

This course consists of studies in the general areas of evolution and organism diversity. Topics include natural selection, the genetic basis of evolution, speciation and evolutionary change, and the adaptive radiation of organisms

Prerequisites: English 12 or assessment, and C+ in Biology 12 or equivalent

Lecture	M/Th 2:30-5:20	F 306
Lab	T/F 2:30-5:20	F 224

1. Instructor Information

Instructor: David Raju

Office hours:

Office location: Ewing 304

Phone: 370-3925

e-mail: raju@camosun.bc.ca

Learning Outcomes

- be able to identify and classify living organisms to their major taxonomic groupings, and to list their defining characteristics
- be able to describe the major lines of evidence for evolution
- be able to explain major topics in evolutionary theory
- be able to discuss the nature of scientific knowledge; its limits and strengths, and how it is produced

3. Required Materials

- (a) Textbook: Campbell, N.A. and J.B. Reece. Any Edition.
- (b) BIOL 124 Laboratory Manual

COURSE OUTLINE

Grading Systems

4. Course Content and (tentative) Schedule

All exams are on the scheduled dates unless announced otherwise.

Week	DAY'S TOPIC (D), CASE STUDY (C), Video(V)	LAB
July 5-6	Th: Galapagos (C)	F: Introduction: Safety, Ice
-	A Darwinian View of Life (D)	Breaker
	Darwin's Dangerous Idea (V)	
July 9-13	M: Galapagos continued (C)	T: 1. Variability and
-	A Darwinian View of Life continued (D)	Natural Selection in Wood
	Darwin's Dangerous Idea Continued (V)	Lice
	Th: Seven Skeletons (C)	
	The Evolution of Populations (D)	F: 2. Population Genetics
	Great Transformations (V)	and Natural Selection
July 16-20	M: Kin Selection (C)	T: 3. Phylogenetics and
•	The Origin of Species (D)	Classification
	Why Sex (V)	
	Th: As The Worm Turns (C)	F: 4. Microscope/Sketches
	Midterm Review (D)	
	Origin of Species (V)	
July 23-27	M: MIDTERM	T: 6. Protists
, , , , , , , , , , , , , , , , , , ,	Classification (C)	
	Phylogeny and Systematics (D)	
	Th: Microbial Pie (C)	F: 7. Fungi
	Prokaryotes (D)	
	Bacteria and Algae (V)	
July 30-	M: The Fish Kill (C)	T: LAB EXAM I
Aug. 3	Protists (D)	11
1108.0	Ciliates/Flagellates/Amoeba (V)	F: 8. Seedless Plants
	Th: Biodiversity (C)	1. G. Seedless I lands
	Fungi (D), Fungi (V)	
Aug. 6-10	M: BC Day Holiday	T: 9. Seed Plants
1145. 0 10	Th: Yew Tree Controversy (C)	1. 5. Seed Francis
	Plants (D), Plants (V)	F: 10. Animals
Aug. 13-17	M: Rocky Mountain Locust (C)	T: 11. Animals
1146. 13 17	Invertebrates (D)	1. 11. 1 minus
	Arthropods (V)	F: LAB EXAM II
	Th: Antipodal Mystery (C)	1. DAD EXAMIT
	Vertebrates (D)	
	Chordates (V)	
Aug. 20-21	M: Various Invertebrates (V)	T: No Lab
Aug. 20-21	Final Review (D)	1. No Lau
	Tillal Review (D)	
Aug 22-23	Final TBA	

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5. Basis of Student Assessment

Labs/Cases/Assignments	35%
Midterm	15%
Lab Exam I	12.5%
Lab Exam II	12.5%
Final Exam	25%

The Midterm, as well as the lab exams, will be unit exams.

The final lecture exam will be cumulative.

Please bring a pen and pencil to all exams.

6. Grading System

The following percentage conversion to letter grade will be used:

A + = 95 - 100%	B = 75 - 79%	D = 50 - 59%
A = 90 - 94%	B- = 70 - 74%	F = 0 - 49%
A- = 85 - 89%	C + = 65 - 69%	
B+ = 80 - 84%	C = 60 - 64%	

ADDITIONAL INFORMATION

General:

Be sure that you are familiar with the **General Department Policies**, which are stated in the lab manual. A student conduct code will also be observed.

ACADEMIC CONDUCT POLICY

There is an Academic Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.

www.camosun.bc.ca/divisions/pres/policy/2-education/2-5.html

Please note: **Plagiarism** will not be tolerated in any form, and may result in "0". No **programmable devices** are allowed in exams.

Each student is required to sign a **Laboratory Safety Contract** and give it to the instructor prior to commencing laboratory work in the course.

COURSE OUTLINE Grading Systems

<u>Attendance</u>: You are expected to attend all classes and labs, and be on time. It is your responsibility to acquire <u>all</u> information given during a class missed, incl. notes, hand-outs, assignments, changed exam dates etc.

<u>Exams</u>: Missed exams cannot be made up except in case of documented emergency or illness (doctor's note required). Unless prevented by emergency, you need to contact the instructor <u>prior</u> to the exam being missed in order to be eligible for the make-up exam.

<u>Labs and Case Studies</u>: Please come prepared with a pencil and a few sheets of unlined paper, in case drawings are required. You can not turn in a lab or case study for marks if you did not participate in the activity during its scheduled time period!

<u>Assignments</u>: Unless otherwise stated, all assignments are due at the <u>beginning</u> of the lab/class of the due date.

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College Calendar, Registrar's Office or the College web site at http://www.camosun.bc.ca