

COURSE OUTLINE

CAMOSUN COLLEGE
School of Arts & Science
Department

BIOL 124 Evolution and Diversity
Fall 2004

1. Instructor Information

- (a) Instructor: Anna Colangeli, *M.Sc., Ph.D.*
- (b) Office hours: **Tues, Wed, Thurs. 1:30 - 2:20; Tues, Thurs. 3:30 - 4:20**
Open Door Policy: if my door is open - feel free to drop in
- (c) Location: F340D
- (d) Phone: 370-3459
- (e) E-mail: <http://webct.camosun.bc.ca>

2. Intended Learning Outcomes

- 1) be able to identify and classify living organisms to their major taxonomic groupings, and to list their defining characteristics
- 2) be able to describe the major lines of evidence for evolution
- 3) be able to explain major topics in evolutionary theory
- 4) 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. 2002. Biology. 6rd edition.
- (b) BIOL 124 Laboratory Manual

4. Course Content and Schedule

Lecture: Tues, Wed, Thurs: 4:30 - 5:20 PM

Lab: Section 003A: Tuesday, 6:30 - 9:20 PM. Section 003B: Wednesday, 6:30 - 9:20 PM.

You should plan on a minimum of 6 hours outside of scheduled class time for the completion of assignments and for general studying.

5. Basis of Student Assessment (Weighting)

- a) Lab Exam I: Week 6 12.5%
- b) Midterm I: Oct. 7 15%
- c) Midterm II: Nov. 10 15%
- d) Lab Exam II: Week 14 12.5%
- e) Assignments/quizzes 20%
- f) Final Exam: Exam Week 25%

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 = 0.0 - 49%
A- = 85 - 89%	C+ = 65 - 69%	
B+ = 80 - 84%	C = 60 - 64%	

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ADDITIONAL INFORMATION

Be sure that you are familiar with the General Department Policies, which are stated in the lab manual. These policies cover absenteeism, late assignments (but see below), attendance, exam scheduling, plagiarism as well as other topics and will be discussed during the first lab meeting.

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

No programmable devices are allowed in exams.

ATTENDANCE

You are expected to attend all classes. Assignments are due at the **beginning** of the class period on the due date. Assignments not handed in at the beginning of class will be considered late, for which there is a **15% penalty/day**. Also, if you miss a class or are late, you are very likely to miss a handout, assignment or other essential information. Classes begin on time, so don't be late! It is your responsibility to obtain this material from either the instructor or other students. **Laboratory attendance is mandatory. 10% of the lab mark will be deducted for each unexcused lab absence.**

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>

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

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DETAILS

Biol 124– Fall 2004

Assignments in SMALL CAPS; Handouts and films in *Italics*

Week	<i>Labs</i>		<i>Lecture</i>
Sept 6 – Sept 10	Introduction to Lab Safety; <i>What is Expected; Ice Breaker</i> Introduction to WebCT Introduction to microscopes	24 24	1) Introduction to the Course 2) Systematics I: Taxonomy and species concepts 3) Systematics II: Reproductive isolating mechanisms and higher classification
Sept 13 – Sept 17	LAB 3: PHYLOGENETICS AND CLASSIFICATION	25 27	4) Systematics III: Phylogenetic systematics and cladistic analysis 5) Prokaryotes 6) Prokaryotes
Sept 20 – Sept 24	Lab 5: Prokaryotes – part 1 <i>Lab 3 due</i>	22	7) Prokaryotes 8) Evolution – evidence 9) Darwinian Revolution
Sept 27 – Oct 1	Lab 5: Prokaryotes – part 2 <i>Film - Beyond Genesis</i>	23	10) Evolution of Populations 11) Evolution of Populations 12) Evolution of Populations
Oct 4 – Oct 8	Lab 2 Population genetics (Hardy-Weinberg) Lab 1 Natural Selection (woodlice)	25	13) Macroevolution 14) Macroevolution 15) Midterm I (Oct 8)
Oct 11 – Oct 15	<i>Lab Exam I</i>	28	16) Protists 17) Protists 18) Protists
Oct 18 – Oct 22	Lab 6: Protists	31 29	19) Fungi 20) Fungi 21) Seedless Plants
Oct 25 – Oct 29	Lab 7: Fungi Lab 8: Seedless Plants	30	22) Seedless Plants 23) Seed Plants 24) Seed Plants
Nov 1 – Nov 5	Lab 9: Seed plants; <i>Film - Plants</i>	32 33	25) Seed Plants 26) Introduction to Animals 27) Invertebrates: Porifera
Nov 8 – Nov 12	<i>Film Cnidarians</i> Lab 10a: Animals 1 – Porifera, Cnidaria, Ctenophora		28) Invertebrates: Cnidaria, Ctenophora 29) Midterm II (Nov 10) 30) No Class (Remembrance Day – Nov 11)
Nov 15 – Nov 19	<i>Film – Flatworms; Film Mollusca</i> <i>Film Annelida; Film Nematoda</i> Lab 10b: Animals 2 – Platyhelminthes, Rotifera, Mollusca, Annelida		31) Invertebrates: Platyhelminthes, Rotifera 32) Invertebrates: Mollusca 33) Invertebrates: Annelida, Nematoda
Nov 22 – Nov 26	Film: Echinodermata Lab 11a: Animals 3 – Nematoda, Arthropoda, Echinodermata	34	34) Invertebrates: Arthropoda 35) Echinodermata <i>Invertebrate Study Guide</i> 36) Chordates through Agnatha
Nov 29 – Dec 3	Lab 11b: Animals 4 (chordates)		37) Sharks and bony fish 38) Amphibians 39) Reptiles
Dec 6 – Dec 10	<i>Lab Exam II</i>		40) Birds 41) Mammals 42) Review