

CAMOSUN COLLEGE

Biology 124 – Evolution and Diversity

Winter 2005

Instructor: Tom Mace
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Office hours: Monday – Friday 12:30 – 13:30

Schedule: Lecture: Weds.,Thurs.,Fri. 09: 09:20 - 10:20 (Sect.001)
 Mon.,Weds.,Thurs. 13:30 - 14:20 (Sect.002)
 Laboratory: Sect.001A Monday 09:30 – 12:20
 Sect.002A Monday 14:30 – 17:20
 Sect.001B Tuesday 09:30 – 12:20
 Sect.002B Tuesday 14:30 – 17:20

COURSE DESCRIPTION

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.

OBJECTIVES

After successful completion of this course, you will be able to: identify and classify organisms and list the defining characteristics of the major taxonomic groupings; be able to describe the major lines of evidence for evolution; be able to explain major topics in evolutionary theory; and be able to discuss the nature, limits and strengths of scientific knowledge

RECOMMENDED TEXT

Campbell, Neil A. and Jane B. Reece. 2002. **Biology 6th ed.** Benjamin Cummings

EVALUATION:

Midterm Lecture Exam	20 %	Lab Exam I	17.5 %
Final Lecture Exam	35 %	Lab Exam II	17.5 %
Assignments	10 %		

The College has adopted the following standard grade scale, to be used in all courses:

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

Tentative Schedule

Note: Suggested readings refer to selections from Campbell 6th edition. The course content may contain additional information not covered within these passages

	<u>Lecture Topic</u>	<u>Laboratory</u>
Jan.10 - 14	Diversity of Life (pp 522 – 523) Evolutionary Time (pp 484 – 493)	No Laboratory During First Week
Jan.17 - 21	Origins of Life (pp 510 – 522) Evolution Theory (Chapt.22)	Microscopes
Jan.24 - 28	Population Genetics (Chapt.23) Viruses.	Phylogenetics and Classification (pp 494 – 503)
Jan.31 – Feb 4	Prokaryotes (Chapt.27)	Population Genetics
Feb.7 - 11	Protista (Chapt.28) Feb.10 - 11 Reading Break – No Classes	The Prokaryotes
Feb.14 - 18	Protista	The Protists
Feb.21 - 25	Lecture Midterm Exam – Weds. Feb. 23 Fungi (Chapt.31)	Kingdom Fungi
Feb.28 – Mar.4	Early Land Plants (Chapt.29)	Midterm Lab Examination
Mar.7 - 11	Seed Plants (Chapt.30)	Seedless Plants
Mar.14 - 18	Invertebrates (Chapt.32)	Seed Plants
Mar.21 - 24	Invertebrates (Chapt.33) Good Friday – College Closed (March 25)	Kingdom Animalia I
Mar.29 – Apr.1	Chordata and Relatives (Chapt.33)	Easter Monday – No Laboratories
Apr.4 - 8	Vertebrates (Chapt.34)	Kingdom Animalia II
Apr.11 - 15	Vertebrates	Final Laboratory Examination
