

School of Arts & Science BIOLOGY DEPARTMENT BIOL 124 Evolution and Diversity Winter 2015

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/biol.html

Ω Please note: the College electronically stores this outline for five (5) years only. It is strongly recommended you keep a copy of this outline with your academic records. You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

| (a) | Instructor: | DAVID RAJU | | |
|-----|---------------|--------------------|--------------------|--|
| (b) | Office Hours: | TBA | | |
| (c) | Location: | Fisher 342A | | |
| (d) | Phone: | | Alternative Phone: | |
| (e) | Email: | raju@camosun.bc.ca | | |
| (f) | Website: | | | |

2. Intended Learning Outcomes

(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

Upon completion of this course the student will be able to:

- 1. Identify and classify living organisms to their major taxonomic groupings, and to list their defining characteristics.
- 2. Describe the major lines of evidence for evolution.
- 3. Explain major topics in evolutionary theory.
- Discuss the nature of scientific knowledge in biology, its limits and strengths, and how it is documented.

3. Required Materials

(a) Required materials will be provided

4. Course Content and Schedule

(This section can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

Biology 001A/B Lectures Wednesday/Friday 8:30-9:50AM in Young 211

Biology 001A Lab Wednesday 1:30-4:20PM in Fisher 244 Biology 001B Lab Tuesday 9:30AM-12:00PM in Fisher 222

| DATE | FORMAT | MAIN TOPIC | |
|---------------|------------------------|---------------------------|--|
| Jan 6,7 | Lab | Systematics Lab | |
| Jan 7 | Lecture/Discussion | Fungi | |
| Jan 9 | Case Study/Discussion | Plants | |
| Jan 13,14 | Lab | Flatworm Study | |
| Jan 14 | Note Making/Discussion | Protozoan Notes | |
| Jan 16 | Case Study/Discussion | Arthropods | |
| Jan 20,21 | Lab | Protozoan Lab | |
| Jan 21 | Case Study/Discussion | Galapagos Islands | |
| Jan 23 | Case Study/Discussion | Kin Selection | |
| Jan 27,28 | Lab | Crustacean Study | |
| Jan 28 | Note Making/Discussion | Invertebrate Notes | |
| Jan 30 | Case Study/Discussion | Sexual Selection | |
| Feb 3,4 | Lab | Invertebrate Lab | |
| Feb 4 | Case Study/Discussion | Natural Selection | |
| Feb 6 | Case Study/Discussion | Speciation | |
| Feb 10,11 | EXAM | EVOLUTION EXAM | |
| Feb 11 | Note Making/Discussion | Fungi Notes | |
| Feb 13 | NO CLASS | READING BREAK | |
| Feb 17,18 | Lab | Mollusk Study | |
| Feb 18 | Note Making/Discussion | Plant Notes | |
| Feb 20 | Case Study/Discussion | Fish | |
| Feb 24,25 | Lab | Fungi/Plants Lab | |
| Feb 25 | Lab in Class | Systematics Study | |
| Feb 27 | Case Study/Discussion | Mammals | |
| Mar 3,4 | Lab | Selection and Sowbugs Lab | |
| Mar 4 | Note Making/Discussion | Chordate Notes | |
| Mar 6 | Case Study/Discussion | Evolution of Populations | |
| Mar 10,11 | Lab | Chordate Lab | |
| Mar 11 | Case Study/Discussion | Insects | |
| Mar 13 | Case Study/Discussion | Native Plants | |
| Mar 17,18 | Lab | Plant Study | |
| Mar 18 | Note Making/Discussion | Prokaryote Notes | |
| Mar 20 | Case Study/Discussion | Birds | |
| Mar 24,25 | Lab | Bird Study | |
| Mar 25 | Case Study/Discussion | Reptiles | |
| Mar 27 | Case Study/Discussion | Amphibians | |
| Mar 31, Apr 1 | Lab | Nematode Study | |
| Apr 1 | Case Study/Discussion | Echinoderms | |
| Apr 3 | NO CLASS | GOOD FRIDAY | |
| Apr 7,8 | EXAM | DIVERSITY EXAM | |
| Apr 8 | Case Study/Discussion | Native Mammals | |
| Apr 10 | Case Study/Discussion | Final Exam Review | |
| | | | |
| TBA | Final Exam | Cumulative | |

5. Basis of Student Assessment (Weighting)

(This section should be directly linked to the Intended Learning Outcomes.)

- (a) Lecture Assignments = 35%
- (b) Laboratory Assignments = 35%
- (c) Diversity Exam = 10%
- (d) Evolution Exam = 10%
- (e) Final Exam = 10%

6. Grading System

(No changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)

Standard Grading System (GPA)

| Percentage | Grade | Description | Grade Point Equivalency |
|------------|-------|---|----------------------------|
| 90-100 | A+ | | 9 |
| 85-89 | Α | | 8 |
| 80-84 | A- | | 7 |
| 77-79 | B+ | | 6 |
| 73-76 | В | | 5 |
| 70-72 | B- | | 4 |
| 65-69 | C+ | | 3 |
| 60-64 | С | | 2 |
| 50-59 | D | Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite. | 1 |
| 0-49 | F | Minimum level has not been achieved. | 0 |

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

| Temporary Grade | Description |
|--------------------|---|
| 1 | Incomplete: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family. |
| IP | In progress: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.) |
| cw | Compulsory Withdrawal: A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement. |

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course 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, at Student Services, or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.

8. ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED

- (a) Please note that to do well in this course your attendance must be excellent.(b) You must be present for lab and lectures in order to hand in the accompanying
- (C) The format of the final exam will be explained and the date(s) will be provided when made available.