

CAMOSUN COLLEGE School of Arts & Science Department of Biology

BIOL-124-001 Evolution and Diversity WINTER 2018

## **COURSE OUTLINE**

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

 $\Omega$  Please note: This outline will <u>not</u> be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

Alternative:

### 1. Instructor Information

- (a) Instructor DAVID RAJU
- (b) Office hours TBA
- (c) Location Fisher 342A
- (d) Phone TBA
- (e) E-mail raju@camosun.bc.ca
- (f) Website

## 2. Intended Learning Outcomes

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.
- 4. Discuss the nature of scientific knowledge in biology, its limits and strengths, and how it is documented.

## 3. Required Materials

- a) iPhone or computer (access to Internet provided on campus)
- b) Campbell Biology (any edition is the recommended text) (DO NOT PURCHASE PRIOR TO DISCUSSION REGARDING TEXT WITH INSTRUCTOR)

### 4. Course Content and Schedule

Biology 001A/B Lectures Monday/Wednesday11:30-12:50PM in Fisher 200 Biology 002A/B Lectures Monday/Wednesday 3:30-4:50PM in Fisher 200 Biology 001A Lab Friday 1:30-4:20PM in Fisher 244 Biology 001B Lab Friday 9:30-12:20PM in Fisher 244 Biology 002A Lab Thursday 1:30-4:20PM in Fisher 244 Biology 002B Lab Thursday 9:30-12:20PM in Fisher 244

| DATE  | Day | MAIN TOPIC              |
|-------|-----|-------------------------|
| Jan 8 | Μ   | Introduction to Biology |
| 10    | W   | Systematics             |

| 11, 12   | Th, F | Phylogeny/Insect Lab     |  |
|----------|-------|--------------------------|--|
| 15       | M     | Process of Science       |  |
| 17       | W     | Sexual Selection         |  |
| 18, 19   | Th, F | Crustacean (Daphnia) Lab |  |
| 22       | M     | Kin Selection            |  |
| 24       | W     | Natural Selection        |  |
| 25, 26   | Th, F | Selection (Sowbug) Lab   |  |
| 29       | M     | Evolution Continued      |  |
| 31       | W     | Protists                 |  |
| Feb 1, 2 | Th, F | Prokaryote/Protist Lab   |  |
| 5        | M     | Evolution Review         |  |
| 7        | W     | Plants                   |  |
| 8, 9     | Th, F | Plants One Lab           |  |
| 12       | M     | NO CLASS                 |  |
| 14       | W     | NO CLASS                 |  |
| 15, 16   | Th, F | NO LAB                   |  |
| 19       | M     | EXAM 1                   |  |
| 21       | W     | EXAM1                    |  |
| 22, 23   | Th, F | Plant Two Lab            |  |
| 26       | M     | Birds                    |  |
| 28       | W     | Fungi                    |  |
| Mar 1, 2 | Th, F | Fungi Lab                |  |
| 5        | M     | Amphibians               |  |
| 7        | W     | Invertebrates            |  |
| 8, 9     | Th, F | Invertebrate One Lab     |  |
| 12       | M     | Rodents                  |  |
| 14       | W     | Prokaryotes              |  |
| 15, 16   | Th, F | Invertebrate Two Lab     |  |
| 19       | M     | Fish                     |  |
| 21       | W     | Chordates                |  |
| 22, 23   | Th, F | Chordate Lab             |  |
| 26       | M     | Gymnosperms              |  |
| 28       | W     | Mammals                  |  |
| 29, 30   | Th, F | NO LAB                   |  |
| April 2  | M     | NO CLASS                 |  |
| 4        | W     | Diversity/Final Review   |  |
| 5, 6     | Th, F | Flatworm (Planarian) Lab |  |
| 9        | M     | EXAM 2                   |  |
| 11       | W     | EXAM 2                   |  |
| 12, 13   | Th, F | Bird (Owl) Lab           |  |
|          |       |                          |  |
| ТВА      | ТВА   | EXAM 3                   |  |

## 5. Basis of Student Assessment (Weighting)

- a) Lecture assignments = 20%
- *b)* Laboratory assignments = 20%
- c) Exam 1 = 20%
  d) Exam 2 = 20%
- e) Exam 3 = 20%

## 6. Grading System



Standard Grading System (GPA)

Competency Based Grading System

# 7. Recommended Materials to Assist Students to Succeed Throughout the Course

## 8. College Supports, Services and Policies



## Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <u>http://camosun.ca/about/mental-health/emergency.html</u> or <u>http://camosun.ca/services/sexual-violence/get-support.html#urgent</u>

### **College Services**

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <u>http://camosun.ca/</u>

### **College Policies**

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <a href="http://camosun.ca/about/policies/">http://camosun.ca/about/policies/</a>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

## A. GRADING SYSTEMS http://camosun.ca/about/policies/index.html

The following two grading systems are used at Camosun College:

### 1. Standard Grading System (GPA)

| Percentage | Grade | Description                          | Grade Point<br>Equivalency |
|------------|-------|--------------------------------------|----------------------------|
| 90-100     | A+    |                                      | 9                          |
| 85-89      | А     |                                      | 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     |                                      | 1                          |
| 0-49       | F     | Minimum level has not been achieved. | 0                          |

## 2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

| Grade | Description   |
|-------|---|
| СОМ   | The student has met the goals, criteria, or competencies established for this course, practicum or field placement.   |
| DST   | The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement. |
| NC    | The student has not met the goals, criteria or competencies established for this course, practicum or field placement.  |

## **B.** 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 at <a href="http://camosun.ca/about/policies/index.html">http://camosun.ca/about/policies/index.html</a> for information on conversion to final grades, and for additional information on student record and transcript notations.

| Temporary<br>Grade | Description  |
|--------------------|--|
| I                  | <i>Incomplete</i> : 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                 | <i>In progress</i> : A temporary grade assigned for courses that are designed to have<br>an anticipated enrollment that extends beyond one term. No more than two IP<br>grades will be assigned for the same course.   |
| CW                 | <i>Compulsory Withdrawal</i> : 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. |