



School of Arts & Science  
BIOLOGY DEPARTMENT  
BIOLOGY 124  
Evolution & Biological Diversity  
Fall 2014 (Sept. – Dec.)

## COURSE OUTLINE

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

⚡ 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

Instructor:	Sarah Cockburn		
Office Hours:	Tue 11:30 AM – 12:30 PM Thurs 1130 AM – 12:30 PM		
Location:	F352		
Phone:	250-370-3925		
Email:	cockburns@camosun.bc.ca		
Website:	<a href="http://online.camosun.ca/">http://online.camosun.ca/</a> (D2L entry site)		

**IMPORTANT NOTE:** If my office hours do not match up with your schedule, this should not dissuade you from coming to see me! If you would like to meet to discuss anything pertaining to the course *not* during my scheduled office hours, simply arrange an appointment by e-mail (cockburns@camosun.bc.ca) and I will be very pleased to meet with you at a mutually convenient time. ☺

### 2. Intended Learning Outcomes

Upon completion of this course the student will:

- 1) Identify and classify living organisms to their major taxonomic groupings, and 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

- 1) Textbook: Campbell Biology, Canadian Edition. 2015. Biology, 1st ed., Pearson Education, Inc., San Francisco, CA.
- 2) Camosun College Biology Faculty. Fall, 2014. Biology 124 Lab Manual, Camosun College, Victoria, B.C.

#### 4. Course Content and Schedule

##### Class Schedule:

**Lectures:** Tue (Y211) 10:00 AM – 11:20AM  
Th (Y211) 10:00 AM – 11:20AM

**Lab Section A:** Mon (F244) 3:30 PM – 6:20 PM  
**Lab Section B:** Tue (F224) 1:30 PM – 4:20 PM

##### Course Content:

See Last Page

#### 5. Basis of Student Assessment (Weighting)

Lab Exam I	week of Oct. 6	10%
Lab Exam 2	week of Dec. 1	15%
Lecture Exam I	Oct. 1	15%
Lecture Exam II	Oct. 29	15%
Final Lecture Exam	as scheduled	25%
Assignments/quizzes		20%

\*\*\* Lab exams will be unit exams. Lecture exams will be cumulative.

#### 6. Grading System

##### Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		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](http://camosun.ca) for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary 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, 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 <sup>rd</sup> course attempt or at the point of course completion.)
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.

## 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](http://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.

## Plagiarism

Plagiarizing is appropriating the work of another or parts or passages of another's writing (including the ideas or language) and passing them off as the product of one's own mind or manual skill. **Plagiarism will not be tolerated.** All written material must be done individually. This **includes lab data and graphs**; although lab work is done in groups, material submitted for grading must be processed and submitted independently. Plagiarism, **including the copying of any part of assignments or lab assignments**, is a serious offence and is considered to be academic misconduct.

## Cheating

A student caught cheating on an exam will forfeit all credit for that exam and perhaps for the course. Cheating is a serious offence and is considered to be academic misconduct. **Cheating includes, but is not limited to, using unauthorized materials in a quiz/exam and providing information to another person regarding exam content.**

The consequences for cheating and plagiarism are outlined by Camosun College policies (see <http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf> and <http://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.1.pdf>) and may be severe.

### Additional information

#### Lab Safety

Under **NO** circumstances will students ingest food or drink in the lab. Taking oral medication or applying makeup or lip balm in the lab is also prohibited. You may leave the lab at a convenient time if you are thirsty, need a snack or require medication.

Failure to adhere to the lab safety principles will result in the inability to enter the lab, or expulsion from the lab, and the subsequent **loss of credit** for that lab, including any written assignments

#### Laboratory Attendance

The laboratory experience is critical to the course objectives and so attendance throughout the entire laboratory session is mandatory and will be noted. Lateness in arriving, failure to attend the lab or leaving the lab before its scheduled finish time will result in forfeiting credit for that lab, including any written assignments.

If a lab session is missed, another student's data **may not** be used to complete a lab assignment for credit. Exceptions can be made **at the instructor's discretion** in legitimate cases of emergency (e.g. illness); in such cases the instructor must receive **advance notification** and **documented evidence** of the situation (e.g. medical certificate) and grant approval for any accommodation. In cases when a lab is done over two weeks, missing one of the weeks without instructor approval will result in a 50% reduction in the grade for any assignment associated with that lab.

It is *absolutely* necessary to read and mentally work through each exercise before coming to lab. Otherwise you may not be able to finish on time, annoy your lab partner, or flunk a pre-lab pop quiz. Please also come prepared with a pencil and a few sheets of unlined and graph paper, in case drawings are required.

#### Lecture Attendance

Attending lectures is a critical part of succeeding in this course. There may be some in class quizzes and other in-class activities for marks. If you know that there is a lecture that you will miss where an announced activity will take place, you must let me know ahead of time and have a legitimate reason to miss it (e.g. an emergency or an illness with documented evidence).

Lectures will be delivered in a PowerPoint format. PowerPoint slides will be made available on the Biology 124 D2L website.

#### Missed Exams and Assessments

Quizzes and the exams must be written at the scheduled times. Under no circumstances will make-up exam be administered. However, it is understood that emergency circumstances occur (e.g. illness or emergency in the immediate family); for such circumstances accommodation may be offered at the discretion of the instructor, provided (a) the instructor is notified in advance of the exam (not after) and (b) the student provides documented evidence of the circumstance (i.e. medical certificate). The accommodation will be in the form of a make-up exam or adjusting the weighting of the final lecture exam to make up the missing marks, at the discretion of the instructor.

**Please note: holidays or scheduled flights are not considered to be emergencies!**

#### Late Penalties

Unless otherwise stated, all assignments are due at the **beginning** of the lab/class of the due date. There is a 10% /day late penalty (including weekend days). The format is expected to be professional, i.e. a neat, legible,

clean copy. "Rough" drafts risk rejection and a subsequent late penalty. If the assignment is more than one page, separate pages **must be stapled** before you come to class

**Note:** There is the option of 1 free late assignment. There will be no penalty provided the assignment is received **prior** to it being marked and returned to the class. Any assignment received after its return to the rest of the class will be marked but will not receive credit.

### **Study Habits:**

Lecture notes will be provided in point form. These should be used as a study guide, not as your sole source of information! You will need to write down additional key words for examples and explanations given during lecture. It is also recommended practice to transcribe these notes into a study-friendly format after each lecture, incorporating additional information from your textbook. Study these notes before the next class to prepare yourself for new material, which will often build on previously covered material.

Due to time constraints, not all details can be covered in lecture, and you may be held responsible for textbook material not specifically discussed in class. Please keep up with your readings, and take advantage of office hours if you need extra clarification and help, or simply would like to discuss a topic a little further.

The schedule, which follows, is an attempt to outline the weekly activities of the class. It is subject to change or modification as the need arises.

<b>Date</b>	<b>Lecture Topic</b>	<b>Ch.</b>	<b>Laboratory Exercise</b>
Sept. 2 - 5	Biological Diversity lecture Evolution – Darwinian	22 25	Introduction
Sept. 8 - 12	Phylogeny Population Evolution	26 23	Lab 1 Phylogeny Lab 2 Natural Selection Appendix 2 Microscopes
Sept. 15 - 19	Species Evolution	24	<b>Fieldtrip</b>
Sept. 22 - 26	Prokaryotes	27	Lab 3 Prokaryote lab
Sept. 29 – Oct. 3	Protists <b>Lecture Midterm 1</b>	28	Lab 3 - completed Lab 4 Protist lab
Oct. 6 - 10	Protists	28	<b>Lab Exam 1</b>
Oct. 14 – 17	Seedless Plants	29	<b>No Scheduled Lab (Thanksgiving)</b>
<b>October 13 – Thanksgiving – College Closed</b>			
Oct. 20 - 24	Seed Plants	30	Lab 5 Seedless plant lab
Oct. 27 – 31	Fungi <b>Lecture Midterm 2</b>	31	Lab 6 Seed plant lab
Nov. 3 - 7	Animal Evolution Invertebrates	32 33	Lab 7 Fungi Lab
Nov. 10 - 14	Invertebrates	33	<b>No scheduled Lab (Remembrance Day)</b>
<b>November 11 – Remembrance Day – College Closed</b>			
Nov. 17 - 21	Invertebrates Vertebrates	33 34	Lab 8 Invertebrate Lab 9 Annelida
Nov. 24 - 28	Vertebrates	34	Lab 9 Arthropods & Echinoderms Lab 10 Vertebrate
Dec. 1 - 5	Vertebrates	34	<b>Lab Final Exam</b>