



CAMOSUN COLLEGE
School of Arts & Science
Department

BIOL 103 Non-Majors Biology
Fall 2013

COURSE OUTLINE

1. Course Information

Course Description

Fundamentals of Biology in the context of contemporary issues. Topics include basic principles of biochemistry and cell biology, genetics and nutrition, animal structure and function.

Prerequisites: English 12 **or** assessment. *Math 10 recommended.*

(Students who have recently completed grade 12 Biology will notice an overlap of course content.)

Time and Location

Lecture: 2 A/B Monday 1:00-2:20 in Fisher 202 & Thursday 1:00-2:20 in Fisher 100

Lab: Section 2A: Wednesday 9:30-12:20 in Fisher 226

Section 2B: Wednesday 1:00-3:50 in Fisher 226

Lecture: 3 A/B Monday & Wednesday 4:00-5:20 in Fisher 200

Lab: Section 3A: Monday 6:30-9:20 in Fisher 226

Section 3B: Tuesday 6:30-9:20 in Fisher 226

2. Instructor Information

Instructor: William Hulbert, Ph.D.

Office hours: Monday 12:00-1:00, Monday 5:30-6:30, Thursday 12:00-1:00, other times by appointment request

Office location: F-340D

Phone: 250 370-3434

e-mail: hulbertw@camosun.bc.ca

3. Required Materials

(a) Textbook: Campbell Biology Concepts and Connections 7th ed. Pearson.

(b) **BIOL 103 Laboratory Manual**

4. Course Content and Schedule

The following tentative schedule is subject to change if deemed necessary by the instructor.

Note: mid-terms are scheduled for the first lecture of the week, unless specified otherwise.

WK	DATE OF	LECTURE TOPICS	TEXT CH.	LAB #	LAB TOPICS
1	Sept 2-6	Course Introduction Exploring Life The Chemical Basis of Life	Ch1,p9-11 Ch2,p22-29		Safety Stuff Etc.
2	Sept 9-13	The Molecules of Cells Tour of the Cell	Ch3,p34-47 Ch4,p52-70	1	Lab Tools – Microscopes, balances, & pipetters
3	Sept 16-20	The Working Cell	Ch5,p74-85	2	Eukaryotic and prokaryotic cells
4	Sept 23-27	The Working Cell	Ch5,p74-85	3	Organic molecules
5	Sept 30- Oct 4	MID-TERM I CH 1 TO 5 How Cells Harvest Chemical Energy	Ch6,p88- 104	4	Diffusion and Osmosis
6	Oct 7-11	The Cellular Basis of Reproduction and Inheritance	Ch8,p126- 149	5	Enzymes & Review Lab Exam
7	Oct 14-18	Patterns of Inheritance	Ch9,p152- 178		No Labs
8	Oct 21-25	Molecular Biology of the Gene	Ch10,p180- 206	Labs 1- 5	Lab Exam I
9	Oct 28- Nov1	How Genes are Controlled	Ch11,p210- 217	6	Cell Division
10	Nov 4- Nov8	MID-TERM II CH 6 to 11 Nutrition and Digestion	Ch21	7/8	Human traits & Nutrition
11	Nov 11-15	Circulation	Ch23		No Labs
12	Nov 18-22	The Immune System	Ch24	9	Human Anatomy & Physiology
13	Nov 25-29	Control of Body Temperature and Water Balance	Ch25,p508- 514	10	Human Anatomy & Physiology & Review Lab Exam
14	Dec 2-6	Animals Regulate Their Internal Environment	Ch20,p425- 426 Ch26,p524- 531	Labs 6- 10	Lab Exam II

5. Basis of Student Assessment

Assignments, lab reports & quizzes.....15%

Exams:

Midterm I.....15%

Midterm II.....15%

Lab Exam I.....15%

Lab Exam II.....15%

Final Exam.....25%

Midterms I and II, as well as the lab exams, will be unit exams.

The final lecture exam will be cumulative.

Please bring a pen *and* pencil to all exams.

6. Grading System

The following percentage conversion to letter grade will be used:

A+ = 90 - 100%

A = 85 - 89%

A- = 80 - 84%

B+ = 77 - 79%

B = 73 - 76%

B- = 70 - 72%

C+ = 65 - 69%

C = 60 - 64%

D = 50 - 59%

F = 0 - 49%

ADDITIONAL INFORMATION

General:

Be sure that you are familiar with the General Department Policies, which are stated in the lab manual. A student conduct code will also be observed.

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

Please note: Plagiarism will not be tolerated in any form, and may result in "0".

No programmable devices are allowed in exams.

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

Attendance:

You are expected to attend all classes, and be on time. It is your responsibility to acquire *all* information given during a class missed, incl. notes, hand-outs, assignments, changed exam dates etc.

Missed exams or quizzes cannot be made up except in case of documented illness (doctor's note required). Lab attendance is *mandatory*.

Do not book trips until the exam schedule is known.

Labs:

A **1% final grade penalty** applies to any unexcused absence from lab. Frequent lates may count as an absence. Should you miss roll call at the beginning of lab, please identify yourself to the instructor as "late" or you may remain marked "absent." You need to attend labs and lab exams during your assigned section (A or B). Switching between sections on a permanent or temporary basis requires instructor's permission. Lab assignments can only be handed in for labs actually attended.

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.

Assignments:

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**. 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.

Study Habits:

You will probably find Biology 103 not very difficult, but surprisingly labor-intensive. Good (and regular!!) study habits are required to do well in this course. You should plan on a *minimum* of 6 hours outside of scheduled class time for the completion of assignments and for general studying. Joining a study group can help this make more fun.

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.

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>