## CAMOSUN COLLEGE School of Arts & Science Department

## BIOL 100 Non-Majors Biology I Fall 2004 – Section 001

# **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: M,Tu,Th 11:30-12:20 in F268

Lab: Section A: W 9:30-10:50 in F226

Section B: W 11:00-12:20 in F226

### 2. Instructor Information

Instructor: Charles Molnar

Office hours: TBA

Office location: Richmond House 302 Can be tricky to find!! Next to the greenhouse. Go out the west door (past the printshop and receiving), in the same house as the student health insurance office and the birth control clinic. I am on the top floor.

Phone: 370-3449 e-mail: molnar@camosun.bc.ca

### 3. Required Materials

- (a) Textbook: Johnson, G.B., 2003. The Living World. 3<sup>rd</sup> edition. McGraw Hill.
- (b) BIOL 100 Laboratory Manual

Optional: Study Guide for The Living World.

# 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 (week of)	LECTURE TOPICS	TEXT CH.	LAB #	LAB TOPICS
1	Sep 6	Course Introduction Scientific Method Biochemistry Basics Water & pH	1&3		<u>NO LAB</u> (Labor Day)
2	Sep 13	Organic Macromolecules Cell Membranes & Transport	3 & 4	1	Introduction, Safety; Microscopes & Measurements
3	Sep 20	Cell Biology Energetics	4 & 5	2	Eukaryotic and Prokaryotic Cells
4	Sep 27	Enzymes Photosynthesis Cellular Respiration	5	3	Diffusion & Osmosis
5	Oct 4	MID-TERM I Cell Division: Mitosis	6	4	Enzymes
6	Oct 11	Cancer Meiosis	6		NO LAB (Thanksgiving)
7	Oct 18	Mendelian Genetics Sex-linked Traits	7	5 & App. 3	Mitosis: Onion Root & Genetics Problems
8	Oct 25	Inheritance Patterns Human Genetics	7		LAB EXAM I
9	Nov 1	Replication Protein Synthesis: Transcription/Translation Mutations	8	6 & App. 3	Human Genetics & Genetics Problems cont.
10	Nov 8	MID-TERM II Circulation <i>NO CLASS</i> Nov. 11 (Remembrance Day)	23	7	CATLAB
11	Nov 15	Circulation cont. Gas Exchange/Respiration	23	8	Nutrition
12	Nov 22	Nutrition Digestion	24	9	Human Organ Systems: Models
13	Nov 29	Homeostasis Excretion	24	10 = 9 cont.	Human Organ Systems: Models
14	Dec 6	Catch-up & Review			LAB EXAM II

### 5. Basis of Student Assessment

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

# 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.

McCraw-Hill, the publisher of your textbook, has donated a prize of \$100 to be awarded to the Biology 100 student with the highest mark 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*.

#### Labs:

A **1%** *final grade* **penalty** applies to any unexcused absence from lab. Frequent lates will 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 100 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 <a href="http://www.camosun.bc.ca">http://www.camosun.bc.ca</a>