# CAMOSUN COLLEGE

# BIOLOGY 100 - NON-MAJORS BIOLOGY 1 SPRING 2003

Instructor: Office: Phone: Email: Office hr:	Peggy Hunter Fisher 248C 370-3427 hunterp@camosun.bc.ca TBA	
Lecture:	Lecture:	Mon, Wed, Fri. 9:30 – 11:20
	Laboratory:	Tues. OR Thurs. 9:30 – 12:30

### PREREQUISITES

English 12 or assessment. Math 10 recommended

# WEEKLY SCHEDULE

3 hours of lecture/discussion and 1.5 hours of lab. Each student should plan on a **minimum of 6 hours outside of scheduled class time** for the completion of assignments and for general studying.

#### TEXT

Johnson, George, B. (2003). The Living World (3rd edition). McGraw Hill Co., Inc. (recommended)

### LABORATORY MANUAL

Biology 100 (Non-Majors Biology 1) Laboratory Manual and Supplementary Materials. Camosun College.

### **EVALUATION**

Midterm	30%
Assignments / Quizzes	15%
Lab Exam	20%
Final Exam	35%

The final lecture and lab exams will be comprehensive, and will be scheduled by the registrar during final exam week.

### GRADING

The College has adopted the following standard grade scale, to be used in all courses.

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

### ADDITIONAL INFORMATION

Be sure that you are familiar with the **General Department Policies**, which are summarized in this handout and which will be discussed during the first scheduled laboratory. A **student conduct code** also will be observed and can be found in the Camosun College calendar.

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

Lab attendance is **mandatory**. It is unfortunately not possible to make up missed labs. Students who miss labs will not receive credit for related lab assignments.

Biology 100 includes lab work with **dissections**. Students who have questions or **concerns** regarding dissection **must see the instructor prior to the end of the second week of classes**.

No programmable devices are allowed in exams.

Students who have recently completed grade 12 Biology or Biology 080 will notice an overlap of course content.

Assignments will address both laboratory and lecture material. Most of the **lab assignments will be completed in the lab**. Students will not receive credit for lab assignments if they were not present during the lab. **Late assignments** will be assessed a penalty of **15% for every day** they are overdue. Late assignments will not be accepted after grading of the assignments has been completed.

# TENTATIVE COURSE SCHEDULE - BIOLOGY 100 Spring 2003

DATE	TEXT CHAP.	LECTURE AND DISCUSSION	LAB #	LAB TOPICS	
May 5-9	1	Introduction	1	Microscopes and cells	
	3	Basic Chemistry			
	3	Macromolecules			
May 12-16	4	Cells / Cell membranes Movement in / out of Cells	6	Nutrition	
	5	Enzymes / Energetics Cellular Respiration			
May 19		HOLIDAY			
May 20-23	6	Cell Cycle, Mitosis and Cancer	2	Diffusion and Osmosis	
May 26-30	7	Genetics	3	Enzymes and Scientific Method	
	8/9	Transcription / Translation			
June 2		MIDTERM			
Jun 3 - 6	22	Intro. To Organ Systems	4	Intro. to Genetics / Pedigrees	
	23	Circulation			
Jun 9 - 13	23	Gas Exchange		Comparative Anatomy	
		Excretion and Osmoregulation	5		
Jun 16 - 20	24	Digestive System	_	REVIEW (if time permits)	
	28	Reproduction	6		
Apr.19 - 22		FINAL EXAM (TBA)		LAB EXAM (TBA)	

# **GENERAL DEPARTMENT POLICIES**

- Students are responsible for contacting their instructor if they are absent from exams or quizzes or do not hand in a project on time. Those who are ill and contact the instructor prior to the evaluation time will have alternative times established, but only if a valid written medical excuse has been supplied by a physician. Those who do not contact the instructor will forfeit the grades on quizzes or exams missed. "Late" assignments may be accepted, but at a penalty of 15%/day. In class lab assignments cannot be made up outside of lab time.
- 2. All projects submitted to an instructor for evaluation must be typed or word-processed, double-spaced, and stapled in the upper left corner. [Please, no folders or plastic covers]
- 3. **Attendance is mandatory in lab periods** because many activities depend upon work in pairs or groups of 4 students. Absences will be noted. If absence is due to illness, and a doctor's note is provided, lab work will be reviewed for the student as much as possible.
- 4. All students are required to demonstrate proper care and use of microscopes prior to continuing with laboratory work in department courses.
- 5. Final exams must be written when they have been scheduled during the exam period. No student should plan to be absent from Victoria until after the last day of this period.
- 6. Plagiarism is not accepted. All assignments, other than group reports, even those that are based upon data common to a lab group, should be presented individually. Should two very similar projects, reports or labs be turned in -- the original mark will be divided accordingly.
- 7. Cheating on quizzes and exams is not tolerated. Any incidents will be documented and may result in the student being asked to forfeit the exam and perhaps the course.
- 8. For safety reasons, there is **no eating or drinking** allowed in the lab rooms:
- 9. Prior to taking part in lab activities all students are required to sign a statement certifying that they have read and agree to follow the laboratory procedures and safety regulations.

## CAMOSUN COLLEGE LABORATORY RULES AND PROCEDURES

Laboratory safety is the responsibility of everyone working in the lab. Your work in the biology laboratory will involve the use of equipment, specimens and chemical reagents that may be harmful. It is essential that the procedures and safety regulations are followed to ensure a safe environment and to enhance your learning experience. Failure to adhere to safety regulations will result in expulsion from the lab. You may be asked to demonstrate your knowledge of procedures and safety regulations at any time during the course.

### I. LABORATORY SAFETY EQUIPMENT

Familiarize yourself with the location of the following:

- i) FIRE EXTINGUISHERS
- ii) FIRE BLANKETS
- iii) EYE WASH (located in the prep room)
- iv) EMERGENCY SHOWER (located in the large prep room sink)

The following are the general rules, which apply at all times. Additional safety procedures will be give for specific laboratory exercises. After you have read the following list of procedures and regulations, you must sign the contract provided and give it to your instructor before proceeding with any laboratory work in this course.

### II. RULES AND PROCEDURES

# General

- 1. REPORT ALL ACCIDENTS AND SPILLS IMMEDIATELY.
- 2. Report any condition that appears unsafe or hazardous
- 3. Read the laboratory instructions for the day's lab prior to coming to the lab. Note carefully any additional explanations or directions given orally or written on the board at the beginning of the lab period.
- 4. Clean the lab bench at the beginning and the end of each laboratory session.
- 5. Keep your work area neat, clean, and organized. Any bags or books not required for the laboratory should be placed out of the way, under the lab bench or in a designated area, not in the isles where others may trip over them.
- 6. Learn the correct operation of any equipment before attempting to use it.
- 7. Handle hot glassware with tongs or the protective materials provided. Take care when lighting Bunsen burners. Turn Bunsen burners off when not in use.
- 8. At the end of the lab period, remove labels from containers no longer needed, and clean and return equipment as instructed.

### **Personal Precautions**

- 1. Eating, drinking and chewing gum are prohibited in the laboratory. If you are carrying food items for later consumption, they should be securely wrapped and kept inside your pack. (Better still, leave them in your locker).
- 2. WCB regulations require close-toed shoes in the laboratory. You should wear clothing that will protect you against broken glass or spillage. Pin or tie long hair away from the face and eyes.
- 3. Cover any cuts or abrasions before coming to the lab. Wear gloves or safety glasses or goggles when instructed to do so.
- 4. Organic fumes may cause eye irritation if you wear contact lenses. You are advised to wear glasses rather than contact lenses on days when organic solvents are being used in the lab.
- 5. Students who are pregnant, taking immunosuppressant drugs, or who have a medical condition (eg. epilepsy, diabetes, etc.) that might necessitate special precautions or treatment must inform the instructor of this condition.
- 6. It is highly recommended that all students have up to date tetanus shots to prevent infection from cuts or nicks from scalpels, dissecting needles, etc..

# LABORATORY SAFETY CONTRACT

I have read the laboratory safety regulations as outlined. I understand them, and agree to follow them, as well as any other written or oral instructions provided by my instructor.

I understand that failure to adhere to the safety regulations will result in expulsion from the laboratory.

student signature

date

student name (please print)

course and section