



CAMOSUN COLLEGE
School of Arts & Science

BIOL 151: Human Physiology
Winter 2008

COURSE OUTLINE

CALENDAR DESCRIPTION

This course is the companion to BIOL 150. It provides an overview of functional relationships within the human body. Physiological processes are studied at both the cellular and organ system level, with an emphasis on the maintenance of homeostasis. Laboratory exercises illustrate basic physiological principles.

PREREQUISITES

Biology 150, Chemistry 11 (or equivalent), English 12 or assessment.

1. Instructor Information

Instructor: Don MacRae
Office hrs: see TBA
Location: F346A
Phone: 370-3437
E-mail: dmacrae@camosun.bc.ca

2. Required Materials

Text: Fundamentals of Anatomy and Physiology (7th edition), Martini, F.H. Pearson Benjamin Cummings (2007) OR another college level textbook of anatomy and physiology.

Biology 151 Laboratory Manual, Camosun College, 2008
(downloadable from [www](http://www.camosun.bc.ca))

A lab coat will be useful for some labs

3. Course Particulars

Class hours: 3 hrs lecture/week
 3 hrs lab/week

Out of class: approx. 4 hrs/week

Credits: 4 credits

4. Intended Learning Outcomes

1. Describe the concept of homeostasis and explain how it operates in the major physiological systems of the human body.
2. Demonstrate an understanding of the functioning of the major physiological systems of the human body at the cellular and systemic levels.
3. Explain how the major physiological systems of the body interact to bring about biological behaviors.
4. Understand how physiological processes are altered in injury or disease.
5. Apply anatomical vocabulary in a physiological context.
6. Perform laboratory procedures relevant to physiology (observe physiological phenomena, measure physiological data, organize / record / analyze results of physiological experiments).
7. Utilize critical thinking to apply physiological concepts to specific problem solving situations.

5. Basis of Student Assessment (weighting)

Assignments/tests	20%
Midterm Exam1	15%
Midterm Exam 2	15%
Lab Exam	20%
Final Comprehensive Exam	30%

6. Grading System

The Camosun Standard Grading System will be used to determine the final letter grade:

A+ = 90 - 100%	B = 73 - 76%	D = 50 - 59%
A = 85 - 89%	B- = 70 - 72%	F = 0 - 49%
A- = 80 - 84%	C+ = 65 - 69%	
B+ = 77 - 79%	C = 60 - 64%	

7. Student Responsibilities

1. Follow any safety procedures specified by the instructor while in the Laboratory. Eating or drinking in the laboratory is NOT permitted. A grade penalty of 1% per offense will be applied.
2. Work cooperatively. There are times when laboratory materials are limited in number and must be shared. Working in groups will facilitate access to materials AND, with the appropriate attitude, greatly enhance the learning experience.
3. Recognize that there are times for collaborative efforts and times for individual effort. Do your own work on exams and assignments for which you are the only person receiving credit. In the case of group assignments, aim to contribute equally and discuss disparities of effort within the group and with the instructor ASAP.
4. Hand in assignments on time. Late assignments will be accepted and graded **at the discretion of the instructor**. If there is a reason that an assignment is late, discuss this with the instructor AND provide a brief written or e-mail explanation.
5. Write examinations and tests as scheduled. In the case of illness or emergency, notify the instructor by phone or e-mail **in advance** of the examination. You will be required to provide acceptable documentation to be granted a make-up exam or other form of accommodation.
6. Be familiar with the Camosun College student conduct policy.

BIOLOGY 151 COURSE SCHEDULE WINTER 2008

Timing of lecture topics is **tentative** - changes will be announced in class

Wk	Dates	Lecture Topic	Lab Activity
1	Jan 7-11	Chemical Concepts and Physiology	NO LAB
2	Jan 14-18	Digestion and Metabolism	LAB 1: Movement of molecules in biological systems
3	Jan 21-25		LAB 2a: Acids, Bases & Buffers Lab 2b: Digestion of Organic Molecules
4	Jan 28-Feb 1	Neuromuscular Physiology	LAB 3a: Fermentation & Cellular Respiration Lab 3b: Glucose Monitoring
5	Feb 4-8	Mid- term Exam 1	Lab 4: Electromyography
6	Feb 11-13 Feb 14-15	Sensory Physiology Reading Break	NO LAB
7	Feb 18-22	Cardiovascular Physiology	LAB 5a: Electroencephalograms Lab 5b: Reflexes
8	Feb 25-29		LAB 6a: Somesthetic testing Lab 6b: Vision testing
9	Mar 3-7	Mid- term Exam 2 Immunology	LAB 7a: Electrocardiograms Lab 7b: Cardiovascular Physiology
10	Mar 10-14	Respiratory Physiology	LAB 8: Hematology LAB 9: Immunology
11	Mar 17-21 Mar 21	Urinary Physiology Good Friday - college closed	Lab 10a: Respirometry LAB 10b: Respiratory gases & ventilation
12	Mar 24 Mar 25-28	Easter Monday - college closed	NO LAB
13	Mar 30-Apr 4	Reproductive Physiology	LAB 11a: Urinalysis LAB 11b: Osmoregulation & water balance
14	April 7-11		LAB EXAM
	April 14-19 & 21-22	FINAL EXAM - scheduled by registrar	

