



**CAMOSUN COLLEGE**  
**School of Arts & Science**

**BIOL 151: Human Physiology**  
**Spring 2008**

**COURSE OUTLINE**

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**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.

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**PREREQUISITES**

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

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**1. Instructor Information**

Instructor: Douglas Panton  
Office hrs: T-F 10:30 11:30 AM.  
Location: F344D  
Phone: 370-3506  
E-mail: pantond@camosun.bc.ca

**2. Required Materials**

Text: Fundamentals of Anatomy and Physiology (7<sup>th</sup> 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.dmacrae@camosun.bc.ca](http://www.dmacrae@camosun.bc.ca))

A lab coat will be useful for some labs

### 3. Course Particulars

Class hours:        3 hrs lecture 2 X /week    M-Th 2:30-5:30  
                           3 hrs lab 2 X /week        T-F 11:30-2:30  
 Out of class:        approx. 8 - 12 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)

5%	Participatory Mark	24 marks (1 mark/ class attended)
19%	Lab assignments/quizzes	96 marks (12 assignments X 8 marks)
4%	Lecture assignments	20 marks (10 assignments X 2 marks)
12 %	Lecture midterm exam 1	60 marks
12%	Lecture midterm exam 2	60 marks
12%	Lab midterm exam 1	60 marks
12%	Lab midterm exam 2	60 marks
24%	Final Comprehensive Exam	<u>120 marks</u>
	Total:	500 marks

### 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

<b>Lec. Dates</b>	<b>Lecture Topic</b>	<b>Lab. Dates</b>	<b>Lab Activity</b>
May 5	Chemical Concepts and Physiology	May 6	<b>NO LAB</b>
May 9	Metabolic physiology	May 9	Movement of molecules in biological systems
May 12	Muscular Physiology	May 13	Acids, Bases & Buffers
May 16	Nervous system Physiology	May 16	Fermentation & Cellular Respiration & Glucose Monitoring
<b>May 19</b>	<b>VICTORIA DAY HOLIDAY</b>	May 20	Electromyography & Contractile Principles
<b>May 22</b>	<b>LECTURE EXAM # 1</b>	May 23	Electroencephalograms & Reflexes
May 26	Sensory Physiology	May 27	Somesthetic testing & Vision testing
May 29	Cardiovascular Physiology	<b>May 30</b>	<b>LAB EXAM # 1</b>
June 2	Immunological Physiology	June 3	Electrocardiograms & Cardiovascular Physiology
June 5	Respiratory Physiology	June 6	Hematology & Immunology
<b>June 9</b>	<b>LECTURE EXAM # 2</b>	June 10	Respirometry Respiratory gases & ventilation
June 12	Urinary Physiology	June 13	Urinalysis & Osmoregulation & water balance
June 16	Digestive physiology	June 17	Digestion of Organic Molecules
June 19	Reproductive Physiology	<b>June 20</b>	<b>LAB EXAM # 2</b>
	<b>FINAL EXAM – scheduled by registrar</b>		