



School of Arts & Science  
Biology Department

Biology 151 Human Physiology  
Winter 2007  
Sections: 002A/B and 003A/B  
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: Don MacRae**, F346A, ph: 370-3437, e-mail: [dmacrae@camosun.bc.ca](mailto:dmacrae@camosun.bc.ca)

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## 2. 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.

### 3. Required materials

#### TEXTBOOK:

Seeley, R.R., Stephens, T.D. and Tate, P. *Anatomy and Physiology (7<sup>th</sup> edition)*, McGraw Hill, New York, 2006.

#### Lab Manual:

Biology Department (Camosun College). *Biology 151 Laboratory Manual*, Camosun College, 2007.

Lab coat (disposable lab coats are acceptable)

### 4. Basis of Student Assessment (weighting)

Assignments/tests .....	20%
Midterm Exam .....	20%
Lab Exam #1 .....	10%
Lab Exam #2 .....	15%
Final Comprehensive Exam.....	35%

TOTAL 100%

### 5. Grading System

The following percentage conversion to letter grade will be used:

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

### Student Responsibilities

1. Sign a **Laboratory Safety Contract**, give it to the instructor prior to commencing laboratory work in the course and follow all safety rules and procedures during laboratory exercises.
2. Use acceptable English grammar, pronunciation, spelling and legible handwriting for presentations and evaluations.
3. Hand in assignments on time.
4. Work independently on reports - unless instructed that the evaluation is based on group effort and evaluation. Please see Student Conduct Policy.

## BIOLOGY 151 COURSE SCHEDULE WINTER 2007

This is a **tentative** schedule of lectures and labs. Changes may be announced in class.

<b>Week</b>	<b>Date</b>	<b>Lecture</b>	<b>Lab Activity</b>
1	Jan 9-12	Chemical Concepts and Physiology	<b>NO LAB</b>
2	Jan 15-19	Digestion and Metabolism	LAB 1: Introduction to Chemical Concepts
3	Jan 22-26		LAB 2: Digestion of Organic Molecules
4	Jan 29-Feb 2	Neuromuscular Physiology	LAB 3: Cellular Respiration and Glucose Monitoring
5	Feb 5-7 Feb 8-9	<b>READING BREAK</b>	LAB 4: Electroencephalograms and Reflexes
6	Feb 12-16	Physiology of Sense organs	LAB 5: Sensory Reception
7	Feb 19-23	Cardiovascular Physiology	<b>LAB EXAM #1</b>
8	Feb 26-Mar 2	Immunology	LAB 6: Cardiovascular Physiology
9	Mar 5-9		LAB 7: Hematology
10	Mar 12-16	Respiratory Physiology	LAB 8: Immunology
11	Mar 19-23	Urinary Physiology	LAB 9: Respiratory Physiology
12	Mar 26-30		LAB 10: Urinalysis
13	April 2-5 April 6	Reproductive Physiology <b>Good Friday</b>	<b>LAB EXAM #2</b>
14	April 9 April 10-13	<b>Easter Monday</b>	<b>NO LAB</b>
	April 16-21 & 23-24	<b>FINAL EXAM – time TBA</b>	