

School of Arts & Science BIOLOGY DEPARTMENT

BIOL 151-003 Human Physiology 2011W

COURSE OUTLINE

Instructor: Tom Mace

Office Hours: Monday, Friday 11:30 – 12:30; Friday 12:30 – 1:30; or any other time

when Tom is not in his office.

Location: F248B

Phone: 250-370-3436

Email: mace@camosun.bc.ca

Intended Learning Outcomes

The course description is online @ http://camosun.ca/learn/calendar/current/web/biol.html

Upon completion of this course, you will be able to:

- 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.

Pre-requisites

BIOL 150; and Chemistry 11, or CHEM 060.

Required Material

- (a) Text: Anatomy & Physiology: The Unity of Form and Function, 5th Edition. Saladin, K., McGraw-Hill (2010) **OR** another college level textbook of anatomy or anatomy and physiology.
- (b) Laboratory Exercises and Assignments available for printing via D2L website

Tentative Schedule

	Week	Lecture Topic	Lab Exercise
1	Jan 10-14	Chemical Concepts Digestion and Metabolism	Introduction
2	Jan 17-21	Digestion and Metabolism	Lab 1: Movement of molecules in biological systems
3	Jan 24-28	Neuromuscular Physiology	Lab 2: Acids, Bases and Buffers Digestion of Organic Molecules
4	Jan 31-Feb 4	Neuromuscular Physiology	Lab 3: Fermentation and Respiration
5	Feb 7-11	Physiology of Sense Organs	Lab 4: Electromyography Reaction time
6	Feb 14-18	Cardiovascular Physiology Mid-term Exam 1	LAB 5: Reflexes
7	Feb 21-23 Feb 24-25	Cardiovascular Physiology Reading Break	Lab tutorial
8	Feb 28-Mar 4	Immunology	Lab 6: Somesthetic testing Vision testing
9	Mar 7-11	Respiratory Physiology	Lab 7: Electrocardiograms Cardiovascular physiology
10	Mar 14-18	Respiratory Physiology Mid-term Exam 2	Lab 8: Hematology and Immunology
11	Mar 21-25	Urinary Physiology	Lab 9: Respirometry Respiratory gases and ventilation
12	Mar 28-Apr 1	Urinary Physiology and Fluid Balance	Lab 10: Urinalysis Osmoregulation and water balance
13	April 4-8	Reproductive Physiology	Overview of labs
14	April 11-15	Reproductive Physiology	LAB EXAM

Final lecture exam will be scheduled during formal exam period, April 18 - 29.

Assessment

Assignments/tests	15%
Midterm Exam	17.5%
Midterm Exam 2	17.5%
Lab Exam	20%
Final Comprehensive Exam	30%

Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description	
1	Incomplete: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.	
IP	In progress: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)	
Compulsory Withdrawal: A temporary grade assigned by a Dean when an instafter documenting the prescriptive strategies applied and consulting with peers deems that a student is unsafe to self or others and must be removed from the practicum, worksite, or field placement.		

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, at Student Services, or the College web site.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy which includes plagiarism. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.