

School of Arts & Science BIOLOGY DEPARTMENT

BIOL 153 Anatomy and Physiology 2 Quarter 2 Winter 2007

COURSE OUTLINE

INTRODUCTION

Biology 153 is the second half of a two-semester course on the anatomy and physiology of the human body with applications to clinical nursing practice. The course traces anatomy and physiology of cells, tissues and selected organ systems. Themes, which will be integrated in the course, include physical assessment, diagnostic testing, basic pharmacology, nutrition and development.

Biology	Instructor:	Peggy Hunter	
	Location:	F248C	
	Phone:	370-3427	
	Email:	hunterp@camosun.bc.ca	
	Website:	http://hunterp.disted.camosun.bc.ca	
Nursing	Instructor:	Mary Mavretic	
	Location:	F254C	
	Phone:	370-3281	
	Email:	mavretic@camosun.bc.ca	

1. Instructor Information

2. Intended Learning Outcomes

Upon completion of this course the student will be able to:

- 1. Use knowledge of normal anatomy and physiology to differentiate normal from abnormal when are doing physical assessments of clients.
- 2. Use and understand correct terminology when communicating with other members of the health care team.
- 3. Use knowledge of anatomy and physiology as a basis for further study of pathophysiology.
- 4. Apply knowledge of anatomy and physiology gained through laboratory activities in the clinical setting.
- 5. Help clients by in the maintenance of health and prevention of disease by explaining basic anatomy and physiology, nutrition and pharmacology.

Comprehension of material covered in the prerequisite courses, Biology 12 or 080, Biology 152 and Chemistry 11 is necessary in order to understand concepts taught in Biology 153. Students are expected to review this prerequisite material, if necessary, as it too is testable.

3. Required Materials

TEXTBOOKS – Required

Martini, F. (2006). *Fundamentals of Anatomy and Physiology.* (7th Ed.) Benjamin Cummings, San Francisco.

Martini, F. and Welch, K. (2006). *Applications Manual: Fundamentals of Anatomy and Physiology.* Benjamin Cummings, San Francisco.

Martini, F. (2006). *Martini's Atlas of the Human Body.* Benjamin Cummings, San Francisco.

Camosun College, Department of Biology. Biology 153: Laboratory Manual (W2006)

TEXTBOOKS – Required by those students in Nursing Program

Dugas, B., Esson, L. & Ronaldson, S. (1999). *Nursing foundations: A Canadian Perspective.* (2nd Ed.) Scarborough, Ontario: Prentice Hall Canada Inc.

Estes, M. (2002). *Health assessment & physical examination.* (2nd Ed.) Toronto: Delmar Publishers.

Eisenhauer, L., Wemett, L., Spencer, R., & Burgan, F. (1998). *Clinical pharmacology & nursing management.* (5th Ed.) New York: Lippincott.

TEXTBOOKS, Optional

Seiger, C. (2004). *Study Guide: Fundamentals of anatomy and physiology.* (7th Ed.) Benjamin Cummings, San Francisco.

*Kapit, W. and Elson, L. (2002). *The Anatomy Coloring Book*. New York, NY: Harper & Row. (*or other similar publication)

N.B. You will obtain information from several sources including lectures, class discussions, text books, videos, labs and clinical courses. Do not rely exclusively on any one, or only some of the sources.

Lab requirements

- 1. Lab coat. Disposable lab coats are acceptable.
- 2. Binder for laboratory modules and assignments with lined and blank loose-leaf paper.

4. Basis of Student Assessment (Weighting)

There will be two theory examinations during the term, a midterm laboratory examination and final comprehensive theory and laboratory examinations. Examination questions in Biology 153 will incorporate critical thinking and problem-solving. Theory examinations will include both the nursing (15%) and biology (85%) components of the course. Marks may be awarded for assignments, laboratory reports and class presentations.

Assignments		10%
Midterm Lecture exa	m	.30%
Midterm Lab Exam		.10%
Final Comprehensive	e Lab Exam	.15%
Final Comprehensive	e Theory Exam	.35%

TOTAL 100%

Examinations will be given at times indicated on the Course Schedule. Assignments will be due at times as announced in class. There will be only ONE makeup examination and it will only be granted for genuine emergencies, supported by documentation acceptable to the department. In case of illness or emergency, the student must notify the instructor in advance of the examination in order for alternate arrangements to be made. *Note: Vacation plans do not constitute an emergency.* Please see STUDENT

5. Course Content and Schedule

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

Wk		Lecture	Lab Activity
1	Jan 8-13	Cardiovascular System	LAB 1: Lab Safety
		(Continued from Biol 152)	Cardiovascular blood
2	Jan 15-19	Cardiovascular System	LAB 2: Cardiovascular ECG
		Nursing – Cardiovascular 2	
3	Jan 22-26	Lymphatic System / Immunology	LAB 3: Lymphatic System
4	Jan 29-Feb 2	Microbiology	LAB 4: Microbiology 1
5	Feb 5-7	Microbiology	
		Nursing: Prevention of Infection	
	Feb 8-9	READING BREAK	NO LAB
6	Feb 12-16	Digestive System	LAB 5: Microbiology 2
7	Feb 19-23	Digestive System	LAB EXAM #1
		Nursing: Nutrition	
8	Feb 26-Mar	Digestion	LAB 6: Digestive System and
0	2 20-101al	Metabolism	Nutrition
	2		Nuthion
9	Mar 5-9	MIDTERM EXAM (March 6 th)*	LAB 7: Respiratory System Anatomy
-		Respiratory System	
10	Mar 12-16	Respiratory System	LAB 8 : Respiratory Physiology
		Nursing – temperature and	
		respiratory regulation	
11	Mar 19-23	Urinary System	LAB 9: Urinary System/Urinalysis
12	Mar 26-30	Urinary System	LAB 10: Reproductive System
		Nursing – Urinary elimination	
13	April 2-5	Urinary System	EASTER
	Ameriko	Reproductive System	///·
	April 6	GOOD FRIDAY	(NO LAB)
14	April 9	EASTER MONDAY	
	April 9-12	Reproductive System	FINAL LAB EXAM
15	April 16-21 &	FINAL COMPREHENSIVE	
	23-24	EXAM	
		College exam period	
		Date TBA	

(* the midterm will be scheduled **outside of normal class time**; time and location to be confirmed by instructor)

6. Grading System Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
95-100	A+		9
90-94	А		8
85-89	A-		7
80-84	B+		6
75-79	В		5
70-74	B-		4
65-69	C+		3
60-64	С		2
50-59	D		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 at **camosun.ca** or information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description	
I	<i>Incomplete</i> : 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	<i>In progress</i> : A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.	
cw	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after 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 lab, practicum, worksit or field placement.	

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.

Concerning spelling

Mastering the usage of anatomical and physiological terminology will be important to you for several reasons. Correct usage (pronunciation and spelling) will

- foster self confidence
- help to earn the respect of your professional colleagues
- reduce the chances of practical mistakes which may cause harm or embarrassment

Consider the difference between the terms **peroneal** and **perineal**.

You will be expected to use acceptable pronunciation and correct spelling for presentations, assignments and exams. **Penalties for spelling errors will be applied**. If writing is illegible, no marks will be given.

STUDENT RESPONSIBILITIES

- 1. Students are expected to hand in any required reports on time.
- 2. Late assignments will receive a penalty of 10% per day.
- 3. Attendance is important to ensure success. If unable to attend a session, the student is responsible for arranging with a classmate to obtain information such as notes, handouts and announcements.
- 4. Examinations must be written as scheduled. Exceptions may be made for emergencies at the discretion of the instructor and only if documentation of the illness or emergency acceptable to the department is received. The student must notify the instructor **in advance** of the examination.
- 5. If a student is unable to take the final laboratory examination and provides acceptable documentation, an oral laboratory examination may be given.
- 6. Any evaluation of work for in-class/lab assignments, reports and/or participation will not be given if a student is not present for any reason.
- 7. Students are expected to work independently on reports unless instructed that the evaluation is based on group effort and evaluation.
- 8. Students must know and follow all Safety Rules and Procedures.
- 9. Students must sign the Safety Contract before participating in any laboratory activity.
- 10. Failure to follow the Safety Rules and Procedures will result in penalties at the discretion of the instructor.
- 11. Students must turn off cell phones and pagers during lectures and laboratory sessions.
- 12. All laboratories start punctually. Information necessary for performing the laboratory correctly and safely is given at the beginning of the lab.

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

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 at <u>camosun.ca</u>.

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 on the College web site in the Policy Section.

ACADEMIC MISCONDUCT

Academic misconduct includes but is not limited to the following acts:

- 1. Giving or receiving unauthorized information to or from another student during any examination or test.
- 2. Obtaining or providing, without authorization, questions or answers relating to any examination or test prior to the time of the examination or test.
- 3. Using unauthorized sources of information during any examination or test.
- 4. Asking or arranging for another person to take any examination or test in one's place.
- 5. Plagiarizing, that is, appropriating the work of another or parts or passages of another's writing, or the ideas or language of the same, and passing them off as the product of one's own mind or manual skill.

According to Camosun College policy, the consequence for academic misconduct is an 'F' grade for the work involved or for the course as a whole.