School of Arts & Science
Biology Department

Biology 153 Anatomy and Physiology for Nursing

COURSE OUTLINE Winter 2011

INTRODUCTION

Biology 153 is the second half of a two-semester course on the anatomy and physiology of the human body. The course traces the anatomy and physiology of cells, tissues and selected organ systems.

INSTRUCTOR

Instructor:	Tom Mace (lecture component)
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

LEARNING OUTCOMES

Upon successful completion of Biology 153, you will be able to:

- use your knowledge of normal anatomy and physiology to differentiate normal from abnormal when you are doing physical assessments of clients
- use and understand correct terminology when you are communicating with other members of the health care team
- use your knowledge of anatomy and physiology as a basis for further study of pathophysiology
- help clients by explaining basic anatomy and physiology in the maintenance of health and prevention of disease.

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.

LEARNING SUPPORT AND SERVICES FOR STUDENTS

Learning Skills offers assistance to learners in a variety of ways. See:

http://www.camosun.bc.ca/services/learning-skills/

TEXTBOOKS – Required

Saladin, K. (2010). *Anatomy & Physiology: The Unity of Form and Function.* (5th Ed.) McGraw – Hill, New York.

Camosun College, Department of Biology. (2011). *Biology 153 Laboratory Manual,* Camosun College.

TEXTBOOKS – Optional
(Some students find these resources helpful with their preferred study/learning styles, but they are <u>not</u> required. Please consult your instructor if you have any questions about these optional texts.)

Engelkirk, P.G. and Burton, G.R.W. (2007). *Burton's Microbiology for the Health Sciences*. Lippincott Williams & Wilkins.

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

Krieger, P.A. (2009). *A Visual Analogy Guide to Human Anatomy*. (2nd Ed.) Morton Publishing Company, Colorado.

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. Students are required to wear closed shoes (e.g. no flip flops, sandals, or shoes with holes) **and** a laboratory coat during all lab sessions. (Cloth coats are preferable but disposable ones are acceptable.) If you forget your lab coat when one is required, you may rent one for $5. Without proper protective clothing and shoes, you will not be permitted to attend that lab.

2. Binder for laboratory manual, notes and assignments.

GRADING SCHEME

The following grades will be applied to examinations and other forms of evaluation in this course:

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%		

EVALUATION

There will be two theory examinations during the term, and two laboratory examinations. Examination questions in Biology 153 will incorporate critical thinking and problem-solving. Marks may be awarded for assignments, laboratory reports and class presentations. Examinations will be given at times indicated on the Course Schedule. Assignments will be due at times as announced in class. Please see STUDENT RESPONSIBILITIES

Assignments	15%
Midterm Lecture Exam **(Feb. 23, 5:30-6:50 pm, Y219)**	25%
Lab Exam I (midterm)	10%
Lab Exam II (final comprehensive)	15%
Final Comprehensive Theory Exam	35%
TOTAL	100%

IMPORTANT TO NOTE!

- exams must be written at the scheduled times. If a student is unable to attend an exam because of a genuine medical or other emergency, the instructor must be notified in advance of the examination. Upon submission of acceptable supporting documentation, the following accommodations will be available:

- if the Midterm Lab Exam is missed, the Final Lab Exam will be extended and will count for 25% of the final grade

- if a student is unable to take the final laboratory examination and provides acceptable documentation, an oral laboratory examination may be given

- if the Midterm Lecture Exam is missed, a make-up Lecture Exam will be scheduled during week 11. **This exam will cover all topics up to and including week 10.**

Vacation plans and scheduled flights do not constitute an emergency.

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, **at the beginning of the class**.
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. 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.
6. Students are expected to work independently on reports unless instructed that the evaluation is based on group effort and evaluation
7. Students must know and follow all Safety Rules and Procedures.
8. Students must sign the Safety Contract before participating in any laboratory activity.
9. Failure to follow the Safety Rules and Procedures will result in penalties at the discretion of the instructor.
10. Students **must turn off cell phones and pagers** during lectures and laboratory sessions.
11. All laboratories start punctually. Information necessary for performing the laboratory correctly and safely is given at the beginning of the lab.

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.

ACADEMIC CONDUCT POLICY

There is an Academic Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.

http://www.camosun.bc.ca/policies/Education-Academic/E-2-Student-Services-&-Support/E-2.5.pdf

BIOLOGY 153 COURSE SCHEDULE WINTER 2011

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

Week	Date	Lecture	Lab Activity
1	Jan 10 – 14	Hematology (Continued from Biol 152)	Introductory Lab
2	Jan 17 – 21	Cardiovascular physiology	LAB 1: Lab Safety (Review) Cardiovascular – Hematology
3	Jan 24 – 28	Cardiovascular physiology	LAB 2: Cardiovascular – ECG
4	Jan 31 – Feb 4	Microbiology	LAB 3: Microbiology 1
5	Feb 7 – 11	Lymphatic System Immunology	LAB 4: Microbiology 2
6	Feb 14 – 18	Immunology	LAB 5: Lymphatic System
7	Feb 21 – 23 **Feb 23** **Feb 24 & 25**	**MIDTERM LECTURE EXAM *** **READING BREAK**	**NO LABS**
8	Feb 28 – Mar 4	Digestive System	**MIDTERM LAB EXAM**
9	Mar 7 – 11	Digestive System Metabolism	LAB 6: Digestive System A&P
10	Mar 14 – 18	Metabolism Respiratory System	LAB 7: Nutrition and Metabolism
11	Mar 21 – 25	Respiratory System	LAB 8 : Respiratory System A&P
12	Mar 28 – Apr 1	Urinary System	LAB 9: Urinary System Anatomy & Renal Physiology
13	Apr 4 – 8	Fluid Acid Base Balance Reproductive System	LAB 10: Reproductive System
14	Apr 11 – 15	Reproductive System	**FINAL LAB EXAM**
	Apr 18 – 29 **Apr 22 & 25**	**FINAL COMPREHENSIVE EXAM** (Date TBA) **Easter – College Closed**	

(* the midterm will be scheduled **outside of normal class time in the evening** on Wednesday, February 23rd from 5:30-6:50 pm; location to be confirmed by instructor)