School of Arts & Science
Biology Department

Biology 153 Anatomy and Physiology for Nursing 2

COURSE OUTLINE Winter 2013

INTRODUCTION

This course is a continuation of BIOL 152. It examines anatomy and physiology of organ systems not previously studied. Additional topics include an introduction to microbiology and infection control, nutrition, pregnancy and childbirth. Physiological principles and application to nursing practice are emphasized.

LEARNING OUTCOMES

Upon completion of Biology 153, the student will be able to:

1. Use knowledge of normal anatomy and physiology to differentiate normal from abnormal.
2. Use and understand correct anatomical and physiological terminology as it relates to the cardiovascular, digestive, respiratory, lymphatic, immune, urinary and reproductive systems.
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 a variety of settings.
5. Use concepts related to basic anatomy, physiology, nutrition and microbiology in order to explain 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, as it too is testable.

INSTRUCTOR

Instructor: Tom Mace
Office hrs: Monday to Thursday 11:30 – 12:30; Friday 12:30 – 1:30; or any other time when Tom is in his office.
Location: F248B
Phone: 250- 370-3436

E-mail: mace@camosun.bc.ca

TEXTBOOKS – Required

Martini and Ober. (2011). *Visual Anatomy and Physiology*, Pearson Education Inc. San Francisco.

Department of Biology. (2013). *Biology 153 Anatomy & Physiology II Laboratory Manual,* Camosun College, Victoria. **Labs will be posted on D2L. Please download and print them off as they appear.**

TEXTBOOKS – Optional

(Some students find these resources helpful with their preferred study/learning styles, but they are not 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 Physiology*. (2nd Ed.) Morton Publishing Company, Colorado.

N.B. You will obtain information from several sources including lectures, class discussions, textbooks, 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.
3. This semester, instead of purchasing a lab manual, labs will be posted on D2L for you to download. Please print these labs and complete the prelab before coming to class.

GRADING SCHEME

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

A+ = 90 - 100%	B+ = 77 - 79%	C+ = 65 - 69%	D = 50 - 59%
A = 85 - 89%	B = 73 - 76%	C = 60 - 64%	F = 0 - 49%
A– = 80 - 84%	B– = 70 - 72%		

EVALUATION

There will be two theory examinations and two laboratory examinations. Examination questions in Biology 153 will incorporate critical thinking and problem-solving. Marks will also be awarded for prelab work, quizzes and assignments. 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.

Prelabs	5%
Assignments and quizzes	10%
Midterm Lecture Exam (**Feb. 20, 5:00 – 6:20 pm)**	25%
Lab Exam I (midterm)	10%
Lab Exam II (final)	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.

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STUDENT RESPONSIBILITIES

1. Students are expected to hand in any required reports on time.
2. Assignments are due at the beginning of class. 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.

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://camosun.ca/about/policies/education-academic/e-2-student-services-&-support/e-2.5.pdf

BIOLOGY 153 COURSE SCHEDULE WINTER 2013

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

Week	Date	Lecture	Lab Activity
1	Jan 7 – 11	Blood vessels, blood pressure	Introduction
2	Jan 14 – 18	Capillary exchange Hematology	LAB 1: Lab Safety (Review) Blood vessels, blood pressure
3	Jan 21 – 25	Hematology	LAB 2: Hematology
4	Jan 28 –Feb 1	Lymphatic System Immunology	LAB 3: Microbiology 1
5	Feb 4 – 8	Immunology	LAB 4: Microbiology 2
6	**Feb 11** Feb 12 – 15	**Family Day (College Closed)** Digestive System	LAB 5: Lymphatic System
7	Feb 18-20 **Feb 20** **Feb 21-22**	Digestive system **MIDTERM LECTURE EXAM *** **READING BREAK**	**NO LABS**
8	Feb 25 –Mar 1	Digestive system Metabolism	**MIDTERM LAB EXAM**
9	Mar 4 – 8	Metabolism	LAB 6: Digestive System A&P
10	Mar 11 – 15	Respiratory System	LAB 7: Nutrition and Metabolism
11	Mar 18 – 22	Respiratory System Urinary system	LAB 8 : Respiratory System A&P
12	Mar 25 – 29 **Mar 29**	Urinary System **Good Friday (College closed)**	LAB 9: Urinary System A&P
13	**April 1** Apr 1 – 5	**Easter Monday (College closed)** Fluid Acid Base Balance Reproductive System	LAB 10: Reproductive System
14	Apr 8 – 12	Reproductive System	**FINAL LAB EXAM**

The midterm is scheduled **outside of normal class time in the evening** on Wednesday, February 20th from 5:00-6:20 pm (rooms to be announced)

FINAL COMPREHENSIVE EXAM During Formal Exam Period (Apr 15 – 23)