



School of Arts & Science
Biology Department

Biology 153 Anatomy and Physiology for Nursing 2

COURSE OUTLINE Winter 2014

INTRODUCTION

This course is a continuation of BIOL 152. It examines anatomy and physiology of organ systems not studied in BIOL 152. Physiological principles and application to nursing practice are stressed. Prior completion of BIOL 104 or 126 is an asset. Open only to Nursing students.

LEARNING OUTCOMES

Upon successful completion of this course a student will be able to:

1. Demonstrate proper use and understanding of anatomical and physiological terminology related to organ systems not previously covered in BIOL 152.
2. Use concepts related to basic anatomy, physiology, and histology in order to explain the maintenance of health and prevention of disease.
3. Use knowledge of normal anatomy and physiology to differentiate normal from abnormal when doing physical assessments of clients.
4. Use knowledge of anatomy and physiology as a basis for further study of pathophysiology.
5. Relate knowledge of gross anatomy and physiological processes gained through laboratory activities to assessment of health.
6. Explain the functional integration of all body systems in the maintenance of homeostasis and health.

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

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Office Hours: MON – 1 – 2 pm
WED – 12 – 1 pm
FRI – 12 – 1 pm

TEXTBOOKS – Required

Martini, Nath and Bartholomew (2012). *Fundamentals of Anatomy and Physiology*, Pearson Education Inc. San Francisco.

Department of Biology. (2014). *Biology 153 Anatomy & Physiology 2 Laboratory Manual*, Camosun College, Victoria.

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.

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. 28, 5:30 – 7:00 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.

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. 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.
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.

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.

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 2014

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

Week	Date	Lecture	Lab Activity
1	Jan 6 – 10	Hemostasis Cardiovascular anatomy	Introduction
2	Jan 13 – 17	Cardiovascular anatomy Cardio physiology	LAB 1: Lab Safety (Review) Hematology
3	Jan 20 – 24	Cardio physiology	LAB 2: Cardiovascular anatomy
4	Jan 27 – 31	Blood pressure Capillary exchange	LAB 3: Cardiovascular physiology
5	Feb 3 – 7	Respiratory system	LAB 4: Respiratory system A&P
6	Feb 10 Feb 11 – 12 Feb 13 – 14	Family Day (College Closed) Respiratory system READING BREAK	NO LABS
7	Feb 17 – 21	Respiratory system Lymphatic System	MIDTERM LAB EXAM
8	Feb 24 – 28 Feb 28	Immunology MIDTERM LECTURE EXAM *	Lab 5: Microbiology 1
9	Mar 3 – 7	Immunology Digestive system	LAB 6: Microbiology 2
10	Mar 10 – 14	Digestive	LAB 7: Lymphatic system and blood typing
11	Mar 17 – 21	Digestive system Metabolism	LAB 8 : Digestive System A&P
12	Mar 24 – 28	Metabolism	LAB 9: Nutrition and Metabolism
13	Mar 31 – Apr 4	Urinary System	LAB 10: Urinary System A&P
14	Apr 7 – 11	Fluid Acid Base Balance	FINAL LAB EXAM
	Apr 14 – 17, 22, 25 April 18, 21	FINAL COMPREHENSIVE EXAM (Date TBA) EASTER HOLIDAYS	

(* the midterm will be scheduled **outside of normal class time in the evening** on Friday, February 28th from 5:30-7:00 pm)