# Camosun College, Biology Department Biology 152: Anatomy and Physiology I Sections X05 A & B, Fall 2004 Course Outline

### **INTRODUCTION**

Biology 152 is the first half of a two-semester course on human anatomy and physiology with applications to clinical nursing practice. The course includes cytology, histology and the anatomy and physiology of selected organ systems. Nursing application themes will include physical assessment, diagnostic testing and basic pharmacology, relating to the organ systems studied.

### **INSTRUCTORS**

Dr Ahmed Vawda	F342D	370-3479	vawda@camosun.bc.ca
Sandy Stewart	F314E	370-3244	dragonflies@shaw.ca

## **TEXTBOOKS**

Martini, F. (2004). Fundamentals of Anatomy and Physiology. (6<sup>th</sup> Ed.) Benjamin Cummings, San Francisco.

Camosun College, Department of Biology. *Biology 152 Course Pack*. (2004)

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

Estes, M. (2002). *Clinical companion for health assessment and physical examination*. (2nd Ed) Toronto: Delmar Publishers.

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

## **Optional**

Seiger, C. (2004). *Study Guide: Fundamentals of anatomy and physiology.* (6<sup>th</sup> Ed.) Benjamin Cummings, San Francisco. (available on reserve in the library)

## **Laboratory requirements**

- 1. White laboratory coat (disposable ones acceptable).
- 2. Binder for laboratory modules and assignments with lined and blank loose-leaf paper.

## **EVALUATIONS**

There will be one theory examination during the term, a midterm laboratory examination and final comprehensive theory and laboratory examinations. Theory examinations will include both the nursing and biology components of the course. Marks will also be awarded for laboratory reports, assignments, quizzes and class participation.

Midterm exam		30%
Assignments		10%
Midterm lab exam		10%
Final comprehensive	lab exam	15%
Final comprehensive	theory exam	35%

Examinations must be written at the scheduled times. Assignments will be due on the dates announced in class. There will be only ONE alternate examination that may be granted for genuine emergencies, supported by documentation acceptable to the department. In the 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 RESPONSIBILITIES.

The following letter grades will be applied to examinations and other evaluations in this course:

A+	=	95% - 100%	C+	=	65% - 69%
A	=	90% - 94%	C	=	60% - 64%
A-	=	85% - 89%	D	=	50% - 59%
B+	=	80% - 84%	F	=	less than 50%
В	=	75% - 79%			
В-	=	70% - 74%			

### STUDENT RESPONSIBILITIES

- 1. Students are expected to hand in any required reports on time.
- 2. Late reports will receive a penalty of 10% per day for each weekday. If a report is due on Friday, a penalty of 10% will be applied to Saturday/Sunday period.
- 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 will be made 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 acceptable documentation for missing a theory midterm examination is received, the student will be given an opportunity to write a makeup examination in week 13 which will be valued at the percentage allocated to the missed examination. This makeup examination will include all material covered up to end of week 12.
- 6. If a student is unable to take the midterm laboratory examination and provides acceptable documentation, the final comprehensive laboratory examination will be weighted 25% of the course mark.
- 7. If a student is unable to take the final laboratory examination and provides acceptable documentation, an oral laboratory examination will be given.
- 8. 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.
- 9. Students are expected to work independently on reports unless instructed that the evaluation is based on group effort and evaluation. Please see ACADEMIC MISCONDUCT.
- 10. Students must know and follow all Safety Rules and Procedures.
- 11. Students must sign the Safety Contract before participating in any laboratory activity.
- 12. Failure to follow the Safety Rules and Procedures will result in penalties at the discretion of the instructor.
- 13. Students must turn off cell phones and pagers during all lectures and laboratories.

14. All laboratories start punctually. Information necessary for performing the laboratory correctly and safely is given at the beginning of the lab. Therefore, students are expected to arrive at the labs <u>before</u> the scheduled start times in order to be prepared to begin the lab on time.

### ACADEMIC MISCONDUCT

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

- Giving or receiving unauthorized information to or from another student during any examination or test.
- Obtaining or providing, without authorization, questions or answers relating to any examination or test prior to the time of the examination or test.
- Using unauthorized sources of information during any examination or test.
- Asking or arranging for another person to take any examination or test in one's place.
- 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.

## **Concerning spelling**

Anatomy is a logical and precise study of a complex subject. The terminology used to describe the body's features is similarly complex. Because the terms have been developed over a period of hundreds of years and were drawn from several languages, especially Latin and Greek, learning their correct usage is a challenging task.

Mastering the usage of these terms 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 washing the peroneal area and the perineal area)

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.

## **Knowledge of pre-requisite material**

It is important that you are familiar with material that has already been covered in the prerequisite courses, Biology 12 or Biology 080 and Chemistry 11. This information is necessary in order to understand concepts taught in Biology 152. Students are expected to review this prerequisite material on their own, especially those topics listed as "**review**" in the course objectives and chapters 2 and 3 in your textbook. This information, as it relates to topics covered in the course, is also examinable.

You will obtain information from several sources including lectures, class discussions, textbooks, videos, laboratory exercises and clinical courses. Do not rely exclusively on any one, or only some of the sources. A strongly recommended approach to successfully completing this course is to review topics in your textbook before class and then consolidate information obtained in lectures with that in the textbook, after class.

#### INTENDED LEARNING OUTCOMES

Upon successful completion of Biology 152 and 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.
- demonstrate the ability to apply knowledge of anatomy and physiology gained through laboratory activities to the clinical setting.
- help clients by explaining basic anatomy and physiology, nutrition and pharmacology in the maintenance of health and prevention of disease.

You are encouraged to consult your Instructor if you require assistance or experience difficulty with the course. A variety of services are also available to students to assist with learning. Refer to the college calendar or the college website for information.

## **BIOLOGY 152 COURSE SCHEDULE FALL 2004**

The following is a **tentative** schedule of lectures and labs. Changes may become necessary depending on progress in class.

Week	Dates	Lecture Topics	Lab Activities
1	Sept 7-10	Homeostasis, cells and membrane transport	LAB 1: Lab Safety, Anatomical Terminology and Systems Overview
2	Sept 13-17	Tissues Nursing – Intro to Nursing Applications	LAB 2: Introduction to Microscopy and Tissues
	Sept 20-24	Integumentary System Nursing – Skin integrity	LAB 3: Tissues (cont'd) and Integumentary System
4	Sept 27- Oct 1	Skeletal System	LAB 4: Intro to Skeletal System and Axial Skeleton
5	Oct 4-8	Muscular System	LAB 5: Appendicular Skeleton and Articulations
6	Oct 11 Oct 12-15	THANKSGIVING DAY Nursing – Movement and exercise	LAB EXAM #1
7	Oct 18 Oct 18-22	MIDTERM EXAM Neural Tissue & Action potential	LAB 6: Muscular System
8	Oct 25-29	Central Nervous System	LAB 7: Central Nervous System
9	Nov 1-5	Peripheral Nervous system  Nursing – Sleep	LAB 8: Peripheral Nervous System
10	Nov 11 Nov 8-12	REMEMBRANCE DAY Sensory Perception	NO LAB
11	Nov 15-19	Sensory Perception  Nursing – cognition and perception	LAB 9: Anatomy of Eye and Ear Sensory perception
12	Nov 22-26	Endocrine System	LAB 10: Endocrine System
13	Nov 29 – Dec 3	Cardiovascular System Nursing – Cardiovascular 1	LAB EXAM #2
14	Dec 6-10	Cardiovascular System	LAB 11: Cardiovascular Anatomy
15/16	Dec 13-21	FINAL COMPREHENSIVE EXAM	