



Syllabus
ZOO 323 Integrative Physiology
Winter 2014

Note : Students may not hold credit for both ZOO 323 and KIN 323.

Time: Lectures – T 4:00-6:30

Instructor : Dr. Carol Kroeker
Office : A2156
Phone: 571-2550, ext 5910
Email: ckroeker@ambrose.edu

Text : Vander's Human Physiology: the Mechanisms of Body Function
By Widmaier, Raff, and Strang. 10th ed.

Or: Human Physiology: From Cells to Systems, 6th edition
Lauralee Sherwood
West Publication Co.

Note: You may substitute an earlier edition of the text for the course (or possibly another suitable Physiology text – but please check with me).

This course builds upon fundamental principles of human systems physiology, with a focus on how the integration of these physiological systems provides the means by which our bodies maintain homeostasis from the systemic down to the cellular level.

Lecture material ranges from cellular processes to the whole organism and interactions with the environment. It will discuss how physiological systems affect each other, particularly in conditions such as exercise or physiological stress.

Learning Objectives:

1. To gain an understanding of the integrative nature of human physiology and how this interaction relates to the concept of homeostasis and its mechanisms.
2. To describe the interrelationships between various systems in the human body, and the clinical relevance of these relationships in disease.
3. To analyse the effects of exercise and extreme environments on the human body.
4. To provide a framework for problem-solving using the principles of integrative physiology.

Mark Distribution : 2 Midterm Exams 40%

Assignments / Presentations	20%
Final Exam	40%

This course consists of 3 hours of lectures per week, plus out-of-class time for presentations.

The midterm and final exam will be a combination of multiple choice questions, as well as short and long answer questions. While most questions will be based on lecture material, the textbook reading will absolutely help in the understanding of this material. Attendance at lectures will help ensure success on course exams and assignments.

TENTATIVE LECTURE SCHEDULE

WEEK OF	TOPIC
Jan. 14	Introduction / Metabolism / Hormonal Control
21	Energy Balance / pH balance
28	Cardiovascular / Respiratory Interactions
Feb. 4	Cardiovascular / Renal Interactions
11	Exam I
18	Reading Week
25	Exercise Physiology
Mar. 4	Steroids / Pregnancy Physiology
11	Thermal Physiology / Thermoregulation
18	Exam II
25	Altitude Physiology / Space Physiology / Diving Physiology
Apr. 1	Stress Physiology
8	Review

SUPPLEMENTARY REFERENCES: Located in AUC library or at University of Calgary.

Human Anatomy and Physiology (5th ed.)
- A.P. Spence and E.B. Mason

Human Anatomy and Physiology (9th ed.)
- G.J. Tortora and S.R. Grabowski

Human Physiology- Functions of the Human Body
- R.M. Durham

Textbook of Medical Physiology (11th ed)

- A.C. Guyton

Human Physiology (8th ed.)

- S.I. Fox

Grading Scheme

A+	97-100%	C+	67-70%
A	90-96%	C	63-67%
A-	87-90%	C-	60-63%
B+	83-87%	D+	54-59%
B	77-83%	D	50-53%
B-	70-77%	F	Below 50%

Important Notes/Dates:

The last day to enter a course without permission and /or voluntary withdrawal from a course without financial penalty – January 19, 2014

The last day to voluntarily withdraw from a course or change to audit without academic penalty – March 21, 2014.

Please note that final grades will be available on your student portal. Printed grade sheets are no longer mailed out.

Classroom Etiquette:

It is expected that students will take an active role in the learning process. This includes: (a) regular class attendance, (b) reading course material in advance of class, and (c) engaging in discussions during class.

In respect to the professor and to your fellow students, we ask that you:

- a) Turn your phone off during class and that you don't use it for texting during lecture or lab
- b) Not have conversations with the people beside your during lecture – it is very distracting to the people around you
- c) Use your laptops for lecture material and assignments only – that you are not using the internet or facebook during class time.
- d) Arrive to lecture and lab on time
- e) Don't come to class or lab with your ipod or equivalent.

These will help to maximize the learning experience for you and your fellow students (and will keep your professor in a good mood).

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Student Handbook and Academic Calendar. Personal information, that is information about an individual that may be used to identify that individual, may be collected as a requirement as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Academic dishonesty is taken seriously at Ambrose University College as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to give credit to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from Ambrose. Students are expected to be familiar with the policy statements in the current academic calendar and the student handbook that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar and the Student Handbook that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean.