Moravian College

Department of Biological Sciences Anatomy and Physiology - BIO 103 Fall 2013

Instructors: Dr. Cecilia M. Fox

Ms. Marie Kennedy Hosier (laboratory instructor)

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Fox Office Hours: Wednesdays 12-3pm, Thursdays 1-3pm

and by appointment

Hosier Office Hours: Wednesdays 10am-12pm, Thursdays 2-4pm

Lecture: Mondays, Wednesdays and Fridays 8:55-9:45am - Dana Lecture Hall,

Collier Hall of Science

Lab: 3 sections: Mondays 1:15-4:15pm - Collier Hall of Science - Room 302;

Wednesdays or Fridays 1:15-4:15pm - Collier Hall of Science - Room 303

Textbook: <u>Seeley's Principles of Anatomy</u> and Physiology, 2nd Ed.

by Philip Tate

McGraw Hill Publishers

Lab Manual: Laboratory Manual for Seeley's Principles of Anatomy and Physiology, 2nd

Ed.

by Eric Wise

McGraw Hill Publishers

Dissecting Kits: Available in the Bookstore

Clickers: Available in the Bookstore and are mandatory for the course

<u>Course Description:</u> This course offers an in depth anatomical and physiological study of the human integumentary, skeletal, muscular and nervous systems. Concepts and principles important to the understanding of the human body are addressed in lecture as well as case study assignments of clinical situations. Laboratory includes fetal pig and organ dissections, microscope study of tissues and evaluation of physiological processes.

Course Objectives: Upon completion of this course, the student will be able to:

- a) understand the human anatomy of the integumentary, skeletal, muscular and nervous systems
- b) understand the relationships between structure and function in the various systems
- c) recognize the different types of cells and tissues found in these systems

- d) understand the physiological mechanisms behind the human body's response to normal and stressed situations
- e) appreciate the complexity of living organisms through dissection of selected mammalian organs

<u>Grading:</u> The grading system is as follows:

(+/- will be administered as the professor deems appropriate)

A = 90 · 100 B = 80 · 89 C = 70 · 79 D = 60 - 69

Your final grade will be based on the following criteria:

Three lecture exams: 100 points each = 300 points
Two lab exams: 100 points each = 200 points

Best ten lecture quizzes: 10 points each = 100 points

Final lecture exam: 200 points

Case study presentation: 100 points

Lecture participation and preparation: 100 points

Total: 1000 points

Expectations:

- a) Attendance: Regular lecture and lab attendance is expected. Please be on time! No make-up exams will be given unless you have an acceptable reason (family emergency, illness, etc). If an emergency should arise, you must notify me prior to the lecture exam and not after. If you plan to miss a lab please notify Dr. Fox or Ms. Hosier in advance. Students are allowed a maximum of three absences in lecture and one absence in lab within this semester. If you miss class or lab more than the allowed times, 50 points will be deducted from your lecture or lab participation grade. Another 10 points will be deducted from your lecture or lab participation grades for each additional absence. Please be aware that absences are not divided into excused and unexcused. Regardless of the reason, an absence from class or lab is counted as an absence.
- b) Cheating: will not be tolerated. Students will be held to the highest standards as specified by the Moravian College Honor Code. Violations of this code will be handled in the most severe manner allowed by college policy.
- c) Reading Assignments: should be completed prior to lecture as well as lab.

^{**} Both lecture material and textbook readings are fair game for lecture exams.

^{**} The final lecture exam is cumulative.

^{**} Case study presentation will be discussed as the course progresses.

^{**} Please note: it is within the instructor's purview to apply qualitative judgment in determining grades for an assignment or the entire course

- d) Lecture Quizzes: A quiz covering the week's material will be given on <u>Fridays.</u> Make-up quizzes are <u>not offered</u> under any circumstances since only the top 10 are counted in your final grade.
- e) Lab Preparation: You are expected to come to lab prepared for that day's exercise. For each lab session please bring your: textbook, lab manual, lecture notes and dissection kit.
- f) Extra Help: If difficulties interpreting lecture or lab material arise, please contact your professor(s) for extra tutoring sessions. We will be more than happy to help!
- g) Cell Phones/Pagers: Please either turn off or set on vibrate/quiet mode your cell phones and pagers prior to entering the lecture hall and laboratory. As a courtesy to the professor, no text messaging during lecture and lab!

Tentative Lecture Schedule

Week of Aug. 26	Topic Readi The Human Organism	ng Assignment Chapter 1
Sept. 2	The Chemical Basis of Life (Brief overview)	Chapter 2
	Cell Structures and Their Functions	Chapter 3
Sept. 2	No Class - Labor Day	
Sept. 9	Cell Structures and Their Functions (con't)	
Sept. 16	Tissues, Glands and Membranes	Chapter 4
Sept. 23	Integumentary System	Chapter 5
Sept. 25	Exam 1 (Intro through Tissues)	
Sept. 30	Histology and Physiology of Bones	Chapter 6
Oct. 7	Anatomy of Bones and Joints	Chapter 7
Oct. 12-Oct.15	No Class - Fall Break	
Oct. 14	Anatomy of Bones and Joints (con't) Histology and Physiology of Muscles	
Oct. 21	Anatomy and Functions of Skeletal Muscles	Chapter 9
Oct. 28	Anatomy and Functions of Skeletal Muscles	Chapter 9

Oct. 30	Exam 2 (Integumentary through Skeletal System)	
Nov. 4	Anatomy and Functions of Skeletal Muscles (con't)	Chapter 9
Nov. 11-13	No Class - Society for Neuroscience Conference	
Nov. 11	Functional Organization of Nervous Tissue	Chapter 10
Nov. 15	Exam 3 (Muscular System)	
Nov. 18	Central & Peripheral Nervous Systems	Chapter 11
Nov. 25-Dec. 1	Thanksgiving Holiday	
Dec. 2	Special Senses Autonomic Nervous System	Chapter 13 Chapter 14
December 12 (at 1:30pm)	Final Exam	

Tentative Laboratory Schedule

Week of	Topic
August 26	Homeostasis-Resting Pulse Rate
	Monday Lab location: ARC of Johnson Hall
September 2	No Lab - Labor Day
September 9	Introduction to Clinical Database Searchers Organs, Systems and Organization of the Body Microscopy
September 16	Cell Structure and Function Cell Transport and Permeability Tissues
September 23	Tissues (continued) Integumentary System

Sept. 30 Skeletal System

Case Study Presentations 1

October 7 Skeletal System (continued)

Articulations

Case Study Presentations 2

October 14 No Lab - Fall Break

October 21 Practical Exam #1

October 28 Muscular System-Human

Cat Dissection

November 4 Muscular System (continued)

November 11 Histology of Nervous Tissue

Nerve Physiology

Case Study Presentations 3

November 18 Dissection of Sheep Brain

Reflex and Sensory Testing

November 25-Dec. 1 Thanksgiving Break

December 2 Practical Exam # 2

Students who wish to request accommodations in this class for a disability should contact learning services for academic and disability support at 1307 Main Street, or by calling 610-861-1510. Accommodations cannot be provided until authorization is received from the Academic Support Center.

Professors reserve the right to amend this syllabus as the course progresses.