

Moravian College
Department of Biological Sciences
Anatomy and Physiology - BIO 103
Fall 2009

Instructors: Dr. Cecilia M. Fox
Ms. Marie Kennedy Hosier (laboratory instructor)

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Fox Office Hours: Mondays and Wednesdays 12-2pm, Tuesdays 10am-12pm
and by *appointment*

Hosier Office Hours: Mondays 9am-12pm, Wednesdays 10am-12pm and Fridays 10am-12pm

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

Lab: 2 sections: Wednesdays or Fridays 1:15-4:15pm - Collier Hall of Science
Room 303

Textbook: Seeley's Principles of Anatomy and Physiology
by Philip Tate
McGraw Hill Publishers

Lab Manual: Laboratory Manual for Seeley's Principles of Anatomy and Physiology
by Eric Wise
McGraw Hill Publishers

Dissecting Kits and Protective Eyewear: Will need to be purchased by the September 9th and 11th lab sessions
Available in the Bookstore

Course Description: 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

Grading: 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
Three lab exams:	100 points each =	300 points
Best Ten Lecture Quizzes:	10 points each =	100 points
Best Ten Lab Quizzes :	5 points each =	50 points
Final lecture exam:		200 points
Case study assignments	50 points each =	100 points
Lecture participation and preparation:		100 points
Lab participation and preparation:		<u>50 points</u>
		1200 points

- ** Both lecture material and textbook readings are fair game for lecture exams.
- ** The final lecture exam is cumulative.
- ** Case study assignments 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

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 Professor 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 participation grade. Another 10 points will be deducted from your lecture participation grade for each additional absence. **Please be aware that absences are not divided into excused and unexcused. Regardless of the reason, an absence from class 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.
 - d) *Lecture Quizzes:* A quiz covering the week's material will be given on **Fridays.**
 - 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, dissection kit and protective eyewear.
 - 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!**
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Tentative Lecture Schedule

<u>Week of</u>	<u>Topic</u>	<u>Reading Assignment</u>
Aug. 30	The Human Organism	Chapter 1
Sept. 6	The Chemical Basis of Life (brief overview) Cell Structures and Their Functions	Chapter 2 Chapter 3
Sept. 7	No Class (Labor Day)	
Sept. 13	Cell Structures and Their Functions (con't)	
Sept. 20	Tissues, Glands and Membranes	Chapter 4
Sept. 27	Integumentary System	Chapter 5
Oct. 4	Histology and Physiology of Bones	Chapter 6
Oct. 5	Exam 1 (Intro through Tissues)	
Oct. 10-13	Fall Recess	
Oct. 11	Anatomy of Bones and Joints	Chapter 7
Oct. 14-21	Society for Neuroscience Conference	
Oct. 18	Anatomy of Bones and Joints (con't) Histology and Physiology of Muscles	Chapter 8
Oct. 25	Anatomy and Functions of Skeletal Muscles	Chapter 9

Oct. 28	Exam 2 (Integumentary through Skeletal System)	
Nov. 1	Anatomy and Functions of Skeletal Muscles	Chapter 9
Nov. 8	Anatomy and Functions of Skeletal Muscles (con't)	Chapter 9
Nov. 15	Functional Organization of Nervous Tissue	Chapter 10
Nov. 18	Exam 3 (Muscular System)	
Nov. 22	Functional Organization of Nervous Tissue	Chapter 10
Nov. 25-29	Thanksgiving Holiday	
Nov. 29	Central & Peripheral Nervous Systems	Chapter 11
Dec. 6	Special Senses Autonomic Nervous System	Chapter 13 Chapter 14
December 15 (at 1:30pm)	Final Exam	

Tentative Laboratory Schedule

<u>Week of</u>	<u>Topic</u>	<u>Lab Exercise Reading</u>
August 31	Homeostasis-Resting Pulse Rate Microscopy	Handout Exercise # 2
September 7	Introduction to Clinical Database Searchers Organs, Systems and Organization Of the Body Cell Structure and Function	Memorial Hall 202 Exercise # 1 Exercise # 3
September 14	Cell Transport and Permeability Tissues	Handout Exercise # 4

September 21	Tissues continued Integumentary System	Exercise # 4 Exercise # 5
September 28	Practical Exam # 1	
October 5	Skeletal System	Exercises # 6,7,8,9
October 12	Skeletal System continued Articulations	Exercise # 10
October 19	Muscular System-Human Cat Dissection	Exercises #12, 13, 14, 15
October 26	Muscular System continued	
November 2	Practical Exam # 2	
November 9	Histology of Nervous Tissue Nerve Physiology Dissection of Sheep Brain	Exercise # 16 Exercise # 17
November 16	Nervous System Physiology: Reflexes Cranial Nerves And Special Senses	Exercise # 19 Handout
November 23	Thanksgiving Holiday - No Lab	
November 30	Final Practical # 3	

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