## Moravian College

Department of Biological Sciences Anatomy and Physiology - BIO 103 Fall 2007

Instructors: Dr. Cecilia M. Fox Phone: 610-861-1426

E-mail: <u>cfox@moravian.edu</u>

Office: Collier Hall of Science, Room 304

Office Hours: Mondays, Wednesdays and Fridays 11:15am-12:15pm, Thursdays 10am-

11am and by appointment

Lecture: Mondays, Wednesdays and Fridays 9:10am-10am - Dana Lecture Hall,

Collier Hall of Science

Lab: 2 sections: Wednesdays or Fridays 12:45-3:45pm - Collier Hall of Science

Room 303

Textbook: Anatomy and Physiology – 2<sup>nd</sup> edition

by Elaine N. Marieb Benjamin Cummings

Lab Manual: <u>Laboratory Manual for Anatomy and Physiology</u>

2<sup>nd</sup> edition

by Elaine N. Marieb Benjamin Cummings

Dissecting Kits: Will need to be purchased by the September 12<sup>th</sup> and 14<sup>th</sup> lab sessions

Available in the Bookstore

<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

## 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 Two lab exams: 100 points each = 200 points Best Ten Lecture Quizzes: 10 points each = 100 points Final lecture exam: 200 points Case study assignments 50 points each = 100 points Class participation and preparation: 100 points 1000 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.
- \*\* The "class participation / preparation grade" is based on your participation in lecture as well as your preparation for lab.
- \*\* 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 exam and not after. If you plan to miss a lab please notify me 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 class participation grade. Another 10 points will be deducted from your class 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 be sure to 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 for extra tutoring sessions. I 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	<u>Topic</u>	Reading Assignment	
Aug. 27	Orientation to the Human Body Chemistry Comes Alive (a rev	Chapter 1 view) Chapter 2	
Sept. 3	Cells: The Living Units	Chapter 3	
Sept. 3	No Class (Labor Day)		
Sept. 10	Cells (con't) Cellular Metabolism (a brief i	ntro)	
Sept. 17	Tissue: The Living Fabric	Chapter 4	
Sept. 24	Integumentary System	Chapter 5	
Sept. 26	Exam 1 (Intro through Tissue)		
Oct. 1	Bones and Skeletal Tissues	Chapter 6	
Oct. 8	The Skeleton	Chapter 7	
Oct. 8-10	Fall Recess		
Oct. 15	The Skeleton (con't) Muscles and Muscle Tissue	Chapter 7 Chapter 9	
Oct. 22	Muscular System	Chapter 10	
Oct. 24	Exam 2 (Integumentary through Skeletal Systems)		
Oct. 29	Muscular System	Chapter 10	
Nov.2-7	No class - Society for Neuroscience Conference		
Nov. 5	Muscular System		

Nov. 12	Fundamentals of Nervous System and Nervous Tissue	Chapter 11		
Nov. 12	Exam 3 (Muscular System)			
Nov. 19	Fundamentals of Nervous System	Chapter 11		
Nov. 21-25	Thanksgiving Holiday			
Nov. 26	Central Nervous System Peripheral Nervous System	Chapters 12 Chapter 13		
Dec. 3	Autonomic Nervous System and Special Senses	Chapter 14		
Dec. 10	Review			
December 12-19	Final Exams			
Tentative Laboratory Schedule				
Week of	Topic	Laboratora Essensias		
Week of	Topic	<u>Laboratory Exercise</u>		
Aug. 27	Introduction to Clinical Database Searchers			
	Introduction to Clinical Database Searchers Homeostasis			
Aug. 27	Introduction to Clinical Database Searchers	Reeves Library		
Aug. 27	Introduction to Clinical Database Searchers  Homeostasis Resting Pulse Rate Care/Use of Compound Microscope  The Language of Anatomy	Reeves Library  Exercises provided in lab		
Aug. 27 Sept. 3	Introduction to Clinical Database Searchers  Homeostasis Resting Pulse Rate Care/Use of Compound Microscope	Reeves Library  Exercises provided in lab  Exercise provided in lab		
Aug. 27 Sept. 3	Introduction to Clinical Database Searchers  Homeostasis Resting Pulse Rate Care/Use of Compound Microscope  The Language of Anatomy Organ Systems Overview	Reeves Library  Exercises provided in lab  Exercise provided in lab  Exercises 1, 2		
Aug. 27 Sept. 3 Sept. 10	Introduction to Clinical Database Searchers  Homeostasis Resting Pulse Rate Care/Use of Compound Microscope  The Language of Anatomy Organ Systems Overview The Cell: Anatomy and Division	Reeves Library  Exercises provided in lab  Exercise provided in lab  Exercises 1, 2  Exercise 3		
Aug. 27 Sept. 3 Sept. 10 Sept. 17	Introduction to Clinical Database Searchers  Homeostasis Resting Pulse Rate Care/Use of Compound Microscope  The Language of Anatomy Organ Systems Overview The Cell: Anatomy and Division  Classification of Tissues	Reeves Library  Exercises provided in lab  Exercise provided in lab  Exercises 1, 2  Exercise 3  Exercises 5		
Aug. 27 Sept. 3 Sept. 10 Sept. 17 Sept. 24	Introduction to Clinical Database Searchers  Homeostasis Resting Pulse Rate Care/Use of Compound Microscope  The Language of Anatomy Organ Systems Overview The Cell: Anatomy and Division  Classification of Tissues  Integumentary System	Reeves Library  Exercises provided in lab  Exercise provided in lab  Exercises 1, 2  Exercises 3  Exercises 5  Exercises 6		

(Introduction-Joints)

Oct. 22	Muscular System		Exercise 12	
	Fetal Pig Dissection	E	xercise provided in lab	
Oct. 29 Muscular System (con't) ** Only Wednesday lab session will meet this week		**I will be attending the SFN Conference		
Nov. 5	Muscular System (con't)			
** Only Friday lab session will meet this week				
Nov. 12	Histology of Nervous Tissue Dissection of Sheep Brain		exercises 13, 22 exercise 19	
Nov. 19	Thanksgiving Holiday			
Nov. 26	Human Reflex Physiology		xercise 16	
	Cranial Nerves and Special Senses Exercise	E	xercise 17	
Dec. 3	Lab Exam 2 (Muscular System-Special Senses)			

(Professor reserves the right to amend this syllabus as the course progresses.)