Moravian College
Department of Biological Sciences
Anatomy and Physiology - BIO 103
Fall 2008

Instructors: Dr. Cecilia M. Fox
Ms. Marie Hosier (lab instructor for laboratory section B)

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Office: Collier Hall of Science, Room 304
Fox Office Hours: Mondays, Wednesdays and Fridays 11:15am-12:15pm, Thursdays 10am-11am and by appointment
Hosier Office Hours: Fridays from 11am-12:30pm in Collier Room 303

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: 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 10th and 12th lab sessions

Protective Eyewear: 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
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

** 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 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!

### Tentative Lecture Schedule

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
<th>Reading Assignment</th>
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</thead>
<tbody>
<tr>
<td>Aug. 25</td>
<td>The Human Organism</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>Sept. 1</td>
<td>The Chemical Basis of Life (brief overview)</td>
<td>Chapter 2</td>
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<tr>
<td></td>
<td>Cell Structures and Their Functions</td>
<td>Chapter 3</td>
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<tr>
<td>Sept. 1</td>
<td>No Class (Labor Day)</td>
<td></td>
</tr>
<tr>
<td>Sept. 8</td>
<td>Cell Structures and Their Functions (con’t)</td>
<td></td>
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<tr>
<td>Sept. 15</td>
<td>Tissues, Glands and Membranes</td>
<td>Chapter 4</td>
</tr>
<tr>
<td>Sept. 22</td>
<td>Integumentary System</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>Sept. 24</td>
<td><strong>Exam 1</strong> (Intro through Tissue)</td>
<td></td>
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<tr>
<td>Sept. 29</td>
<td>Histology and Physiology of Bones</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>Oct. 4-7</td>
<td>Fall Recess</td>
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<tr>
<td>Oct. 6</td>
<td>Anatomy of Bones and Joints</td>
<td>Chapter 7</td>
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<tr>
<td>Oct. 13</td>
<td>Anatomy of Bones and Joints (con’t)</td>
<td>Chapter 8</td>
</tr>
<tr>
<td></td>
<td>Histology and Physiology of Muscles</td>
<td></td>
</tr>
<tr>
<td>Oct. 20</td>
<td>Anatomy and Functions of Skeletal Muscles</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>Oct. 22</td>
<td><strong>Exam 2</strong> (Integumentary through Skeletal Systems)</td>
<td></td>
</tr>
<tr>
<td>Oct. 27</td>
<td>Anatomy and Functions of Skeletal Muscles</td>
<td>Chapter 9</td>
</tr>
</tbody>
</table>
Nov. 3 Anatomy and Functions of Skeletal Muscles (con’t) Chapter 9
Nov. 10 Functional Organization of Nervous Tissue Chapter 10

Nov. 14 Exam 3 (Muscular System)

Nov. 17-19 No Class – Society for Neuroscience Conference

Nov. 17 Functional Organization of Nervous Tissue Chapter 10

Nov. 24 and Dec. 1 Central & Peripheral Nervous Systems Chapter 11

Nov. 26-30 Thanksgiving Holiday

Dec. 8 Special Senses Chapter 13
Autonomic Nervous System Chapter 14

December 12-19 Final Exams

Tentative Laboratory Schedule

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
<th>Laboratory Exercise</th>
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<tbody>
<tr>
<td>Aug. 25</td>
<td>Homeostasis: Resting Pulse Rate Microscopy</td>
<td>Exercise provided in lab Exercise 2</td>
</tr>
<tr>
<td>Sept. 1</td>
<td>Introduction to Clinical Database Searchers</td>
<td>Memorial Hall 202</td>
</tr>
<tr>
<td>Sept. 8</td>
<td>Organs, Systems and Organization of the Body Cell Structure and Function Cell Transport and Permeability</td>
<td>Exercise 1</td>
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<td>Exercise 3</td>
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<tr>
<td></td>
<td></td>
<td>Physio Ex. (provided in lab)</td>
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<tr>
<td>Sept. 15</td>
<td>Tissues</td>
<td>Exercise 4</td>
</tr>
<tr>
<td>Sept. 22</td>
<td>Integumentary System</td>
<td>Exercise 5</td>
</tr>
<tr>
<td>Sept. 29</td>
<td>Skeletal System</td>
<td>Exercises 6,7,8,9</td>
</tr>
<tr>
<td>Oct. 6</td>
<td>Articulations Review Skeletal System</td>
<td>Exercise 10</td>
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| Oct. 13 | **Lab Exam 1**  
*Introduction to Joints* |
|---------|--------------------------------------------------|
| Oct. 20 | Muscular System  
Fetal Pig Dissection |
| Oct. 27 | Muscular System (con’t)  
*Review Sheets: Exercises 12, 13, 14, 15* |
| Nov. 3  | Histology of Nervous Tissue  
Nerve Physiology  
Dissection of Sheep Brain |
| Nov. 10 | **No Lab – Society for Neuroscience Conference** |
| Nov. 17 | Nervous System Physiology: Reflexes  
Cranial Nerves and Special Senses Exercise |
| Nov. 24 | **Thanksgiving Holiday** |
| Dec. 1  | **Lab Exam 2**  
*Muscular System-Special Senses* |

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