

Moravian College  
Department of Biological Sciences  
Anatomy and Physiology - BIO 104

Spring 2015

**Instructor:** Professor Marie Hosier

**Office Phone** – 610-861-1674 **Cell Phone:** 610-703-6045 **Phone Hours**-7AM-10 PM

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**Office:** Collier Room 307

**Office Hours:** MW 10:00am-12:00pm, or by appointment

**Lecture:** Monday, Wednesday and Friday 8:55am-9:45am Collier 204 – Dana Lecture Hall

**Lab:** 3 sections: Monday, Wednesday or Friday 1:15-4:15pm  
Collier Hall of Science Room 303

**Prerequisites:** Recommend: BIO 103 or by permission of instructor

**Textbook:** Seeley's Principles of Anatomy and Physiology – 2nd Edition  
by Philip Tate, McGraw Hill

**Lab Manual:** Laboratory Manual for Seeley's Principles of Anatomy and Physiology  
– 2<sup>nd</sup> edition by Eric Wise, McGraw Hill

**Lecture Notes:** Supplemental notes and PowerPoint presentations will be posted on  
Blackboard

**Course Description:** Biology 104 is part two of the Anatomy and Physiology course. This course offers an in depth study of the anatomy and physiology of human endocrine, digestive, respiratory, circulatory, immune, urinary and reproductive systems. Laboratory includes organ and whole animal dissections and evaluation of physiological processes.

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

- a) understand the anatomy of the endocrine, digestive, respiratory, circulatory, immune, urinary and reproductive systems of the human body
- b) comprehend the relationships between structure and function within each system
- c) recognize the interrelationships among the varied 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 cats and selected organs of other mammals

**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

Ten "best" lecture quizzes: 10 points each = 100 points

Case study presentation 100 points

Final lecture exam: 200 points

Class participation and preparation: 100 points

Total: 1100 points

\*\* Both lecture material and textbook readings are fair game for lecture exams.

\*\* The final lecture exam is cumulative.

\*\* Case study assignment will be discussed in the lab sessions 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 makeup 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 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 the dates highlighted in **BOLD** on the syllabus. Make-up quizzes are not offered.

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.

f) Cell Phones and Pagers: Please turn them off and place them on the desk in front of you for each class. As a courtesy to your professor and the rest of the class, do not type text messages during lecture and lab. If it is urgent, please simply leave the room to do your messaging. Thank you.

g) Students who wish to request accommodations in this class for a disability should contact Ms. Elaine Mara, Assistant Director of Academic and Disability Support, located on the first floor of Monacacy Hall (EXT. 1410)  
Accommodations cannot be provided until authorization is received from the office of Learning Services.

h) Extra Help: If difficulties interpreting lecture or lab material arise, please contact either me or Learning Services for a tutor ASAP. I will be more than happy to help!!

Lecture Schedule\*\*

Week of:	Topic	Reading Assignment
January 19, 21, <u>23</u>	Introduction Endocrine System - Hormones	Chapter 1 Chapter 15
January 26, <u>28</u> , 30	Endocrine System - Pituitary Gland, Thyroid Gland, Adrenal, Pancreas, etc	
February 2, 4, <u>6</u>	Circulatory System - Blood	Chapter 16
<b>February 9</b>	<b>Exam # 1</b>	
February 11, <u>13</u>	Circulatory System – Heart	Chapter 17
February 16, <u>18</u> , 20	Cardiac Cycle	
February <u>23</u> , 25, 27	Circulatory System - Blood Vessels, Blood Pressure	Chapter 18
March 2, <u>4</u> , 6	Respiratory System Breathing Mech., Gas Exchange	Chapter 20
March 7-15	Spring Break	
March <u>16</u> , 20	Immune (Lymphatic) System	Chapter 19
<b>March 18</b>	<b>Exam 2</b>	
March 23, 25, <u>27</u>	Digestive System	Chapter 21
March 30, April 1	Urinary System - Kidneys / Nephron, Urine Formation Urinary System – Elimination of Urine	Chapter 23
April 3	Easter Break	
April 6, 8	Reproductive System – Male	Chapter 24
<b>April <u>10</u></b>	<b>Exam # 3</b>	
April 13, 15, <u>17</u>	Reproductive System – Male	Chapter 24
April 20, <u>22</u> , 24	Reproductive System – Female (con't) Pregnancy, Birth Control	Chapter 24 Chapter 25
April <u>27</u> , 29, May 1	Review	

## Laboratory Schedule\*\*

#	Week of:	Topic	Laboratory Exercise
ONE	Jan 19	Introduction	Exercises provided in lab
TWO	Jan 26	Endocrine System Endocrine Rat Lab	Exercise 24 Handout
THREE	Feb 2	Circulatory System - Blood	Exercise 25, 26
FOUR	Feb 9	Circulatory System - Heart Sheep Heart Dissection	Exercise 27
<b>FIVE</b>	<b>Feb 16</b>	<b>Practical Exam # 1</b>	<b>WEEKS 1-4</b>
SIX	Feb 23	Circulatory System – Blood Vessels Blood Pressure and Cat Dissection	Exercises 30, 31
SEVEN	March 2	Respiratory System Respiratory Volumes	Exercises 35, 36
<b>EIGHT</b>	<b>March 7-15</b>	<b>Spring Break</b>	
NINE	March 16	Immune System Blood Typing	Handout
<b>TEN</b>	<b>March 23</b>	<b>Exam # 2</b>	<b>WEEKS 5-7</b>
ELEVEN	Mar 30 Apr 1	Case Presentations	
TWELVE	April 6	Digestion – Chemical and Physical Properties Exercise provided in lab Cat Dissection	Exercise 38
THIRTEEN	April 13	Urinary System – Anatomy and Urinalysis kit and Sheep Kidney Dissection	Exercises 40, 41
Fourteen	April 20	Reproduction and STD Lab and Cat Dissection	Exercise 42, 43
<b>FIFTEEN</b>	<b>April 27</b>	<b>Exam # 3</b>	<b>WEEKS 9-14</b>

\*\* As the professor of this course, I reserve the right to alter this syllabus at any time during the semester. \*\*