

**Moravian College**  
Biology Department  
Anatomy and Physiology - BIO 104  
Spring 2008

Instructor: Dr. Cecilia M. Fox  
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Office: Collier Science - Room 304  
Office Hours: Mondays, Wednesdays and Fridays: 11:30am-12:30pm; Thursdays 1-3pm;  
and by appointment  
Lecture: Monday, Wednesday and Friday 9:10-10:00am  
Collier 204 – Dana Lecture Hall  
Lab: 2 sections: Wednesday or Friday 12:45-3:45pm  
Collier Hall of Science Room 303  
Prerequisites: BIO 103 or by permission of instructor  
Textbook: Anatomy and Physiology – 2<sup>nd</sup> edition  
by Elaine N. Marieb  
Benjamin Cummings  
Lab Manual: Laboratory Manual for Anatomy and Physiology  
2<sup>nd</sup> edition  
by Elaine N. Marieb  
Benjamin Cummings  
Lecture Notes: Lecture outlines, diagrams and PowerPoint presentations will be posted on  
Blackboard  
Dissecting Kits: Available in the Bookstore

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

Two lab exams: 100 points each = 200 points

Ten quizzes: 10 points each = 100 points

Two case studies: 50 points each = 100 points

Final lecture exam: 200 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 documented 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 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. 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 and dissection kit.
- f) Cell Phones and Pagers: Please turn them off (or at the very least, set on vibrate) before walking into the lecture hall and laboratory!!!
- g) Extra Help: If difficulties interpreting lecture or lab material arise, please contact me regarding tutoring sessions ASAP. I will be more than happy to help!!

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

## Lecture Schedule

<u>Week of:</u>	<u>Topic</u>	<u>Reading Assignment</u>
January 14	Introduction Endocrine System - Hormones	Chapter 1 Chapter 15
<b>January 21</b>	<b>No Class – Martin Luther King Jr. Holiday</b>	
	Endocrine System - Pituitary Gland, Thyroid Gland, Adrenal, Pancreas, etc	
January 28	Endocrine System (con't) Circulatory System - Blood	Chapter 16
<b>February 4</b>	<b>Exam 1</b>	
February 4	Circulatory System – Heart, Cardiac Cycle	Chapter 17
February 11, 18	Circulatory System - Blood Vessels, Blood Pressure	Chapter 18
February 25	Immune (Lymphatic) System	Chapter 19, 20
<b>February 29</b>	<b>Exam 2</b>	
<b>March 1-10</b>	<b>Spring Break</b>	
March 10	Respiratory System Breathing Mech., Control of Breathing, Gas Exchange	Chapter 21
March 17,24	Digestive System Nutrition	Chapter 22 Chapter 23
<b>March 21-24</b>	<b>No Class – Easter Holiday</b>	
March 31	Urinary System - Kidneys / Nephron, Urine Formation	Chapter 24
<b>April 2</b>	<b>Exam 3</b>	
April 7,14	Urinary System – Elimination of Urine Reproductive System – Male and Female	Chapter 26
April 21	Reproductive System – Female (con't), Pregnancy, Birth Control	
<b>April 28-May 3</b>	<b>Cumulative Final Exam</b>	

## Laboratory Schedule

<u>Week of:</u>	<u>Topic</u>	<u>Laboratory Exercise</u>
January 14	Introduction Homeostasis Exercise	Exercise provided in lab
January 21	Endocrine System Physio Ex. Activity	Exercise 18 Activity provided in lab
January 28	Circulatory System - Blood	Exercise 19
February 4	Circulatory System - Heart BIOPAC - EKG	Exercise 20
February 11	Circulatory System – Blood Vessels BIOPAC – Pulse Rate and Blood Pressure	Exercise 21, 22
<b>February 18</b>	<b>Lab Exam 1</b>	
February 25	Immune System	Exercises provided in lab
<b>March 3</b>	<b>No Lab- Spring Break</b>	
March 10	Respiratory System BIOPAC – Respiratory Volumes	Exercises 23, 24
<b>March 17</b>	<b>No lab – Easter Holiday</b>	
March 24	Digestion – Chemical and Physical Properties/ Nutrition	Exercises provided in lab
March 31	Urinary System – Anatomy and Urinalysis	Exercises 26
April 7	Anatomy of Reproductive System Birth Control/Paternity Testing	Exercise 27
April 14	Sexually Transmitted Diseases Lab Exam Review	
<b>April 21</b>	<b>Lab Exam 2</b>	

\*\* The lecture and laboratory schedules may be subject to change as the course progresses\*\*