

**Moravian College**  
Biology Department  
Anatomy and Physiology - BIO 104  
Spring 2007

Instructor: Dr. Cecilia M. Fox  
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Office: Collier Science - Room 304  
Office Hours: Mondays, Wednesdays and Fridays: 11:30am-12:15pm; Thursdays (except the first Thursday of each month): 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.
- 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 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. 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

Week of:

Topic

Reading Assignment

January 15	Introduction Endocrine System - Hormones	Chapter 1 Chapter 15
<b>January 19-22</b>	<b>No Class (International Brain Conference)</b>	
January 22	Endocrine System - Pituitary Gland, Thyroid Gland, Adrenal, Pancreas, etc	
January 29	Endocrine System (con't) Circulatory System - Blood	Chapter 16
<b>February 5</b>	<b>Exam 1</b>	
February 5	Circulatory System – Heart, Cardiac Cycle	Chapter 17
February 12, 19	Circulatory System - Blood Vessels, Blood Pressure	Chapter 18
February 26	Immune (Lymphatic) System	Chapter 19, 20
<b>March 2</b>	<b>Exam 2</b>	
<b>March 3-11</b>	<b>Spring Break</b>	
March 12	Respiratory System Breathing Mech., Control of Breathing, Gas Exchange	Chapter 21
March 19, 26	Digestive System Nutrition	Chapter 22 Chapter 23
April 2	Urinary System - Kidneys / Nephron, Urine Formation	Chapter 24
<b>April 4</b>	<b>Exam 3</b>	
<b>April 6-9</b>	<b>Easter Holiday</b>	
April 9,16	Urinary System – Elimination of Urine Reproductive System – Male and Female	Chapter 26
April 23	Reproductive System – Female (con't), Pregnancy, Birth Control	
<b>April 30-May 4</b>	<b>Cumulative Final Exam</b>	

Laboratory Schedule

<u>Week of:</u>	<u>Topic</u>	<u>Laboratory Exercise</u>
January 15	No Lab (International Brain Conference)	
January 22	Introduction Endocrine System	Exercise provided in lab Exercise 18
January 29	Circulatory System - Blood	Exercise 19
February 5	Circulatory System - Heart BIOPAC - EKG	Exercise 20
February 12	Circulatory System – Blood Vessels BIOPAC – Pulse Rate and Blood Pressure	Exercise 21, 22
<b>February 19</b>	<b>Lab Exam 1</b>	
February 26	Immune System	Exercises provided in lab
<b>March 5</b>	<b>No Lab- Spring Break</b>	
March 12	Respiratory System BIOPAC – Respiratory Volumes	Exercises 23, 24
March 19	Digestion – Fetal Pig Dissection	
March 26	Digestion – Chemical and Physical Properties/ Nutrition	Exercises provided in lab
April 2	<b>No Lab – Easter Holiday</b>	
April 9	Urinary System – Anatomy and Urinalysis	Exercises 26
April 16	Anatomy of Reproductive System Birth Control/Paternity Testing Sexually Transmitted Diseases	Exercise 27
<b>April 23</b>	<b>Lab Exam 2</b>	

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