

Moravian College
Biology Department
Anatomy and Physiology - BIO 104
Spring 2006

Instructor: Dr. Cecilia M. Fox
Phone: 610-861-1426
E-mail: cfox@moravian.edu
Office: Collier Science - Room 304
Office Hours: Mondays 10-11:30am, Wednesdays 10:30am-1pm, Thursdays 12-1pm,
Fridays 10-11am and by appointment
Lecture: Monday, Wednesday and Friday 9:10-10:00am
PPHAC 233
Lab: 2 sections: Monday or Tuesday 12:45-3:45pm
Collier Hall of Science Room 303
Prerequisites: BIO 103 or by permission of instructor
Textbook: Anatomy and Physiology – 2nd edition
by Elaine N. Marieb
Benjamin Cummings
Lab Manual: Laboratory Manual for Anatomy and Physiology
2nd edition
by Elaine N. Marieb
Benjamin Cummings
Lecture Notes: Anatomy and Physiology: Lecture Outline and Diagrams
Any notes will be distributed on a daily basis by the professor
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.

** An optional service learning project (March 19th) will be discussed 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 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 for extra 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

<u>Week of:</u>	<u>Topic</u>	<u>Reading Assignment</u>
January 16	Introduction Endocrine System - Hormones	Chapter 1 Chapter 15
January 23	Endocrine System - Pituitary Gland, Thyroid Gland, Adrenal, Pancreas, etc	
January 30	Endocrine System (con't) Circulatory System - Blood	Chapter 16
February 6	Exam 1	
February 6	Circulatory System – Heart, Cardiac Cycle	Chapter 17
February 13,20	Circulatory System - Blood Vessels, Blood Pressure	Chapter 18
February 27	Immune (Lymphatic) System	Chapter 19,20
March 3	Exam 2	
March 5-12	Spring Break	
March 13	Respiratory System Breathing Mech., Control of Breathing, Gas Exchange	Chapter 21
March 20,27	Digestive System Nutrition	Chapter 22 Chapter 23
March 31	No Class – PAS Conference	
April 3	Urinary System - Kidneys / Nephron, Urine Formation	Chapter 24
April 5	Exam 3	
April 10,17	Urinary System – Elimination of Urine Reproductive System – Male and Female	Chapter 26
April 14-17	Easter Holiday	
April 24	Reproductive System – Female (con't), Pregnancy, Birth Control	

May 1-6

Cumulative Final Exam

Laboratory Schedule

<u>Week of:</u>	<u>Topic</u>	<u>Laboratory Exercise</u>
January 16	Introduction	Exercise provided in lab
January 23	Endocrine System The Rat Endocrine System	Exercise 18 Exercise provided in lab
January 30	Circulatory System - Blood	Exercise 19
February 6	Circulatory System - Heart BIOPAC - EKG	Exercise 20
February 13	Circulatory System – Blood Vessels BIOPAC – Pulse Rate and Blood Pressure	Exercise 21,22
February 20	Lab Exam 1	
February 27	Immune System	Exercises provided in lab
March 6	No Lab- Spring Break	
March 13	Respiratory System BIOPAC – Respiratory Volumes	Exercises 23, 24
March 20	Digestion – Fetal Pig Dissection	
March 27	Digestion – Chemical and Physical Properties/ Nutrition	Exercises provided in lab
April 3	Urinary System – Anatomy and Urinalysis	Exercises 26
April 10	Anatomy of Reproductive System Birth Control/Paternity Testing Sexually Transmitted Diseases	Exercise 27
April 17	No Lab – Easter Holiday	
April 24	Lab Exam 2	

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

