## Moravian College

Biology Department Anatomy and Physiology - BIO 104 Spring 2009

## Instructors:

Lecture - Dr. Cecilia M. Fox Lab: Prof. Marie Hosier

Phone - 610-861-1426 610-703-6045 E-mail - cfox@moravian.edu mkh11@psu.edu Office: Collier Room 304 Collier Room 230 Office Hours: Th 1-3pm, Fri 12–2pm Wed, Fri 10-11:30am

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 301

Prerequisites: BIO 103 or by permission of instructor

Textbook: <u>Seeley's Principles of Anatomy and Physiology</u>

by Philip Tate McGraw Hill

Lab Manual: Laboratory Manual for Seeley's Principles of Anatomy and Physiology

by Eric Wise McGraw Hill

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

Blackboard

Dissecting Kits and

Safety Goggles: Available in the Bookstore

<u>Course Description:</u> 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 - 79D = 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.
- \*\* <u>Please note</u>: 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) <u>Cheating: will not</u> 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) <u>Lecture Quizzes</u>: A quiz covering the week's material will be given on Fridays. Make-up quizzes are not offered.
- e) <u>Lab Preparation</u>: 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) <u>Cell Phones and Pagers</u>: Please turn them off (or at the very least, set on vibrate) before walking into the lecture hall and laboratory. **As a courtesy to your professor, do not write text messages during lecture and lab!**
- g) Extra Help: If difficulties interpreting lecture or lab material arise, please contact Learning Services for a tutor ASAP. I will also be more than happy to help!!

**Lecture Schedule** 

Week of:	<u>Topic</u>	Reading Assignment
January 19	Introduction Endocrine System - Hormones	Chapter 1 Chapter 15
January 26	Endocrine System - Pituitary Gland, Thyroid Gland, Adrenal, Pancreas, etc	
February 2	Circulatory System - Blood	Chapter 16
February 4	Exam 1	
February 9	Circulatory System – Heart, Cardiac Cycle	Chapter 17
February 9	No Class	
February 16	Circulatory System - Blood Vessels, Blood Pressure	Chapter 18
February 23	Immune (Lymphatic) System	Chapter 19
February 27	Exam 2	
February 28-March 8	Spring Break	
February 28-March 8  March 9	Spring Break  Respiratory System  Breathing Mech., Control of Breathing, Gas Exchange	Chapter 20
•	Respiratory System Breathing Mech., Control of Breathing,	Chapter 21 Chapter 21 Chapter 22
March 9	Respiratory System Breathing Mech., Control of Breathing, Gas Exchange  Digestive System	Chapter 21
March 9 March 16, 23	Respiratory System Breathing Mech., Control of Breathing, Gas Exchange  Digestive System Nutrition  Urinary System - Kidneys / Nephron,	Chapter 21 Chapter 22
March 9  March 16, 23  March 30	Respiratory System Breathing Mech., Control of Breathing, Gas Exchange  Digestive System Nutrition  Urinary System - Kidneys / Nephron, Urine Formation	Chapter 21 Chapter 22
March 9  March 16, 23  March 30  April 1	Respiratory System Breathing Mech., Control of Breathing, Gas Exchange  Digestive System Nutrition  Urinary System - Kidneys / Nephron, Urine Formation  Exam 3  Urinary System - Elimination of Urine	Chapter 21 Chapter 22 Chapter 23
March 9  March 16, 23  March 30  April 1  April 6, 13	Respiratory System Breathing Mech., Control of Breathing, Gas Exchange  Digestive System Nutrition  Urinary System - Kidneys / Nephron, Urine Formation  Exam 3  Urinary System - Elimination of Urine Reproductive System - Male and Female	Chapter 21 Chapter 22 Chapter 23
March 9  March 16, 23  March 30  April 1  April 6, 13  April 9-13	Respiratory System Breathing Mech., Control of Breathing, Gas Exchange  Digestive System Nutrition  Urinary System - Kidneys / Nephron, Urine Formation  Exam 3  Urinary System - Elimination of Urine Reproductive System - Male and Female  Easter Recess	Chapter 21 Chapter 22 Chapter 23

**Laboratory Schedule** 

Week of:	Topic	<u>Laboratory Exercise</u>
January 19	Introduction Homeostasis Exercise	Exercise provided in lab Exercise 34
January 26	Endocrine System Physio Ex. Activity	Exercise 24 Activity provided in lab
February 2	Circulatory System - Blood	Exercise 25, 26
February 9	Circulatory System - Heart Physio Ex. Activity	Exercise 27
February 16	Circulatory System – Blood Vessels Fetal Pig Dissection	Exercise 30
February 23	Lab Exam 1	
March 2	No Lab- Spring Break	
March 9	Immune System	Exercise 33
March 16	Respiratory System Respiratory Volumes	Exercises 35, 36
March 23	Digestion – Chemical and Physical Properties/ Nutrition Fetal Pig Dissection	Exercise 38 Exercise provided in lab
March 30	Urinary System – Anatomy and Urinalysis	Exercises 40, 41
April 6	Anatomy of Reproductive System Birth Control/Paternity Test	Exercises 42,43
April 13	No lab – Easter Recess	
April 20	Sexually Transmitted Diseases Lab Exam Review	
April 27	Lab Exam 2	

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