BIO 209 Anatomy and Physiology II

Continues the study of human anatomy and physiology. Among the topics considered are the digestive system, metabolism, urinary system, fluid and electrolyte balance, the nervous system, the endocrine system and the reproductive system. Lectures are supplemented by writing assignments, discussion and laboratory sessions that include dissection and elementary physiology experiments.

TEXTBOOK:

There are two versions of the textbook available: binder or hardcover. You may select either one.


REQUIRED LABORATORY MANUAL:
ISBN# 9780495112198
Laboratory Exercises in Anatomy & Physiology with Cat Dissections, (8e) updated edition,
Robert Amitrano and Gerard J. Tortora, Thomas Brooks/Cole, Belmont, CA, 2013 *

OTHER:
Your instructor may require additional supplements.
STUDENT & FACULTY SUPPORT SERVICES:
Services for Students with Disabilities:
A wide variety of services are available to students with documented disabilities through the Office of Specialized Services (OSS). For further information, go to the OSS website: www.bergen.edu/oss.

SPECIFIC OBJECTIVES:
1. To introduce students to the normal anatomy and physiology of selected body systems.
2. To develop an understanding of the importance of homeostasis in maintaining health.
3. To view disease as a disruption of homeostasis.
4. To develop and apply a medical vocabulary.

COURSE CONTENT:

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Functions of autonomic nervous system

8  Sensory, Motor, and Integrative Systems
   Types of sensations, General senses, Sensory and motor pathways, Integrative functions

9  Special Senses
   Olfactory sensation, Gustatory sensation, Visual sensation, Auditory sensation and equilibrium

10 Endocrine System
    Comparison of endocrine and nervous systems, Overview of hormone effects, Mechanisms of hormonal actions, Control of hormonal secretions, Anatomy and physiology of endocrine glands

11 Reproductive Systems
    Male reproductive system, Female reproductive system,

LABORATORY SCHEDULE:

Laboratory 1  Review of Microscope & the Histology of the Digestive System, Exercise 1 and 22
Laboratory 2  Digestive System, Dissection of Cat Digestive System*, Exercise 22
Laboratory 3  Digestive System, Laboratory Tests on Different Foods and Enzyme Actions, Exercise 22
Laboratory 4  Urinary System, Dissection of cat Urinary System* and Dissection of Sheep Kidney, Exercise 23
Laboratory 5  Urinalysis, Exercise 23
Laboratory 6  pH, Buffers, and Acid-Base Balance, exercise 24
Laboratory 7  Nervous Tissue, Nervous System: Spinal cord and spinal nerves, Reflex experiments, Exercises 12 and 13
Laboratory 8  Nervous System: Brain and cranial nerves, Tests of Cranial Nerves and Dissection of Sheep Brain, Exercise 13
Laboratory 9  Nervous System: Autonomic NS, Dissection of cat nervous system (expose brain and Spinal cord), Exercise 13

Laboratory 10  Sensory Receptors, Sensory and Motor Pathways: Characteristics of Sensations, Classification of receptors, Receptors for general senses, and Tests for general senses, Exercise 14

Laboratory 11  Sensory Receptors, Sensory and Motor Pathways: Sensory pathways, Olfactory sensations, Gustatory sensations and Visual sensations, Exercise 14

Laboratory 12  Sensory Receptors, Sensory and Motor Pathways: Auditory sensations and equilibrium, Dissection of cat and beef eye, Exercise 14

Laboratory 13  Endocrine System, Reproductive Systems: Organs of male reproductive system, Exercises 15 and 25

Laboratory 14  Reproductive Systems: Organs of female reproductive system, Dissection of cat reproductive system and pig uterus (containing fetus), Exercise 25

Laboratory 15  Development and genetics, Exercise 25 and 27

*SEPARATE CAT MANUAL IN LABORATORY IS ALSO AVAILABLE

EVALUATION: A. Unit Examinations................................. 65%
B. Laboratory Tests............................................15%
C. Lab Reports..................................................10%
D. Class Participation.........................................5%
E. Term paper/research project..............................5%

Total.................................................................100%

*Every laboratory report must be turned in to the instructor to earn this component toward the final grade.

CLASS PROTOCOL

Make-up Testing: All unit examinations must be taken in order to receive a grade. Any Student who misses an exam must provide documentation as to why they missed the exam. The make-up exam will be administered as soon as the student returns to class or in the Test Center. (Remember you need a valid I.D. to take a test in the Test Center). Any test not taken will result in a zero. A # 2 pencil is needed to take an exam in the Test Center.

Class Assignments: Late assignments will not be accepted.

Class Attendance: Attendance is counted in your final grade. If you miss a class it is YOUR responsibility to find out what you missed either from a classmate or from me. Absence is no excuse.

Lab Attendance: If you find it necessary to miss a laboratory meeting, you should make arrangements, upon your return to school, to make up the laboratory class. If you miss a lab it is YOUR responsibility to find out what you missed either from a classmate or from me.

Laboratory rubber gloves: The College does not supply students with rubber gloves. It is the student’s responsibility to supply gloves for Lab class.

Lateness: Lateness to class or lab sometimes cannot be avoided. Continued lateness is frowned upon.
**Examinations:** All exams must be taken with a **# 2 pencil.** (These will not be supplied by the College). No one will be allowed to leave class once the exam or quiz has started. Be certain to take care of any outside business before the start of the exam or quiz. If you leave during the exam or quiz a zero grade will be given to that exam or quiz.

**Cheating:** Cheating is a serious offense. If a student is suspected of cheating in this class, they will receive a zero grade for that quiz, exam, or assignment. The student will be dismissed from class until they speak to the Department Head or Dean. During an examination or quiz students must keep exams and scan trons covered at all times. No talking or looking around, this will be considered cheating and the student will receive a zero grade and be dismissed from class.

**Smoking Policy:** Bergen Community College is a smoke free campus.

**Eating and Drinking:** Eating and drinking in the classrooms, lecture halls, laboratories and passageways is forbidden. Eating and drinking are permitted in the cafeteria and vending areas only.

**Faculty Absence:** If a class finds the instructor is absent, a class representative should report to Divisional Office (A-325) or the evening office (L-113) after twenty (20) minutes of the period have elapsed. The class should remain until the representative returns with instructions. If the class has been canceled whatever we were going to do that day will be done at the next meeting time and the students should sign in and slip the sign in sheet under my door S-235.

**Cell Phones & Pagers:** Must be turned off during lecture and laboratory classes. Failure to do so will result in being dismissed from class.

1. **GRADE CALCULATIONS:**
   - Lecture exams= 65%
   - Class Part./Atten.= 5%
   - Research paper= 5%
   - Lab Quizzes= 15%
   - Lab Reports= 10%
   - **Total** = 100%

I have carefully read and fully understand the addenda for participation in Anatomy & Physiology II

Signed_____________________________________________         Date______________

Print______________________________________________          Class_____________