

Northeastern Technical College
BIO 211: Anatomy & Physiology II
Spring 2012

Instructor: Miss Mackey; Office--801A with hours as posted
921-6971 (local) or 1-800-921-7399 (toll free)
E-mail: MMackey@netc.edu; you will be a faster response using this rather than sending a message in Moodle

Required Materials: 1. Hole's Anatomy and Physiology by Shier, Butler, and Lewis, 12th edition, 2009
2. A & P Revealed CD & workbook (packaged with text)
3. Photomanual and Dissection Guide to the Cat by Bohensky, 2002
4. NETC student e-mail address
5. latex (or latex-free) gloves
6. safety glasses and lab aprons are available in lab upon request (no purchase required)

Course Description: This is a continuation of BIO 210 including intensive coverage of the body as an integrated whole. All body systems are studied.

Prerequisite: BIO 210 with a grade of "C" or better

Attendance Policy: According to college policy, a student may miss 20% of the scheduled class periods. When a student exceeds this limit, he or she will be dropped for excessive absences. If the student initiates the withdrawal before midterm, a grade of W will be used. After midterm, the grade of W will only be used for students who are passing the course; if a student who is not passing initiates a drop after midterm, he or she will receive a WF. If the instructor initiates the withdrawal due to excessive absenteeism, at any point during the course, a grade of F will be used for students who are dropped. If a student leaves class or lab early, the hours missed will be counted as part of the hours absences.

Three tardies will equal one absence. Please remember this when you are counting your absences. A tardy is when the student comes into class after the roll has been called. You are responsible for material covered in any class or lab you miss.

Grading Policy: Points will be taken off for spelling/grammatical errors on all graded work, except bonus questions. The following represents the percentage of each category toward the final average:

Final Average

Lecture average = 50%
Lab average = 25%
Final Exam = 20%
Homework, etc. = 5%

Grading Scale

92 - 100 = A
83 - 91 = B
74 - 82 = C
65 - 73 = D
Below 65 = F

Makeup Work: Any lecture test taken late must have a "No Questions Asked" certificate attached to the assignment. The test must be made up prior to the student's return to class OR lab. Any work submitted electronically must be received by the instructor prior to the beginning of class. One lab test grade or report will be dropped, so missed lab tests or reports may not be made up or turned in late. Homework may not be submitted late, as all homework assignments, except the lab work analysis assignment and possible field trip report, are completed online and are available for a period of time, typically a week. If the student is absent when the lab work analysis due, he or she should make arrangements to send it electronically by the due date and time or arrange for it to be delivered by another student, etc.

Lab: Practical tests, objective tests, and lab reports are used in lab as assessments. The average will be based on the average of one lab report and the scheduled lab tests, all counting equally. Missed lab work (reports, tests, etc.) may not be made up or submitted late so a zero is recorded for that test or lab report. However, the lowest lab grade will be dropped at the end of the term before final averages are calculated.

Homework, classwork, etc.: Various assignments will be made throughout the semester including a lab result analysis worksheet, field trip questionnaire/report, and online activities on Moodle with those activities based on the A & P Revealed CD or as quizzes from lecture materials. Many assignments, announcements, and handouts will be made on the Moodle course management systems, which students can access at no charge through the NETC website. With the online activities, no credit will be issued for misspelled words or grammatical errors. It is the student's responsibility to be aware of the due dates posted online.

Learning Outcomes:

1. The student will be able to name and identify the major organs of the following systems:

A. respiratory	E. urinary
B. digestive	F. endocrine
C. cardiovascular	F. reproductive
D. lymphatic	
2. The student will be able to discuss the normal functions of each of the organs discussed above, and contrast these functions with abnormalities.
3. The student will be able to discuss the processes of aerobic respiration and lactic acid fermentation, as well as the factors affecting each.
4. The student will be able to discuss how the body maintains homeostasis with regard to water, electrolyte, and acid-base balance.
5. The student will use basic biological lab equipment, such as scalpels, glassware, pipettes, etc. for various lab experiments.

Assessment: Tests covering the assigned chapters of study will be given. No grades will be dropped from lecture tests. A comprehensive final exam will also be given. Lab tests may be given on the previous labs, and some labs may require that reports be submitted. One lab grade will be dropped before final averaging. Outside assignments and reports will be evaluated as outlined in the syllabus or by handouts.

Extra Credit Information: Bonus questions may be offered on lecture tests.

General information: There is no eating, drinking, or smoking in any science lab at NETC as indicated by posted signs. Students should also familiarize themselves with emergency procedures (tornado, fire, etc.) as posted in classrooms and/or discussed in class. Each student must wear his or her student ID at all times when on campus. Use of cell phones/beepers or cameras is not permitted at any time during class or lab. If needed, calculators will be supplied by the instructor.

Academic dishonesty: As stated in the college catalog, any student that plagiarizes or is caught cheating on any assignment in a course will receive a zero for that assignment. The documentation will be collected and reported to the Dean of Student Services.

Classroom etiquette: An integral part of an education is developing a sense of integrity and responsibility toward faculty and other students. Arriving late to class, being unprepared, inappropriate talking while class is in session, using cell phones, etc., negatively reflects on you and your fellow students. Please be considerate to them and mature in your behavior.

Disabilities Statement: Students with disabilities are encouraged to contact the Dean of Student Services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Dean of Student Services will provide guidance regarding official documentation of disabilities and/or accommodation of needs. (See *College Catalog*)

BIO 211 Proposed Topical Lecture Schedule (necessary date changes will be announced via email or in class). Some topics may be covered during lab times.

Chap. 19--Respiratory System

Test #1 on respiratory system (tentative date: week of January 30)

Chap. 17--Digestive System

Test #2 on digestive system (tentative date: week of February 13)

Chap. 4--Cellular Metabolism (selected topics)

Chap. 18--Nutrition & Metabolism (selected topics)

Test #3 on metabolism (tentative date: week of February 27)

Chap. 14--Blood

Chap. 15--Cardiovascular System

Test #4 on cardiovascular system (tentative date: week of March 19)

Chapter 16--Lymphatic System & Immunity

Chap. 20--Urinary System

Chap. 21--Water, Electrolyte, and Acid-Base Balance

Test #5 on lymphatic system, urinary system & fluids (tentative date: week of April 16)

Chapter 13—Endocrine System (may be covered during lab times)

Chapter 22—Reproductive Systems (may be covered during lab times)

Chapter 23—Pregnancy, Growth, & Development (may be covered during lab times)

Test #6 on endocrine & reproductive systems (tentative date: week of April 30)

Comprehensive Final Exam (May 7 – 10, per exam schedule announcement)

Tentative Lab Schedule: any necessary changes will be announced via email or in class. Students should bring both their lab manuals and textbooks to lab each week unless told otherwise. For those labs with data collection, report due dates will be announced in class.

<u>Week of</u>	<u>Topics Covered</u>
January 16	Video on Respiratory System; Organs of the Thoracic and Oral Cavities (cat dissection)
January 23	Lab Test #1 on Thoracic & Oral Cavities; review of scientific method; begin Control of Human Respiration (data collection with laptops)
January 30	finish data collection with laptops for Control of Human Respiration; lecture notes or lab review
February 6	Organs of the Abdominal Cavity (cat dissection); Video on Digestive System
February 13	Lab Test #2 on Abdominal Cavity ; Digestive Enzymes
February 20	complete and/or discuss results of Digestive Enzymes lab; Health Assessment lab
February 27	Lab Test #3 on Digestive Enzymes; Blood & Blood Typing
March 5	Lab Test #4 on Blood; The Heart (sheep heart & models)
March 12	Lab Test #5 on Heart; begin Systemic & Fetal Circulation
March 19	continue Systemic & Fetal Circulation
March 26	Lab Test #6 on Systemic & Fetal Circulation; begin Monitoring EKG lab
April 9	Urinary physiology lab; finish Monitoring EKG lab
April 16	Urogenital System (hog kidney & cat dissection); watch Endocrine System video
April 23	Lab Test #7 on Urogenital System of the Cat; continue Endocrine System; begin Miracle of Life video
April 30	continue with Miracle of Life video; possible administration of last lecture test; possible review for final exam

Other Important Dates to Remember:

Wednesday, March 7: College-wide Midterm (last day to drop with a guaranteed "W")

Monday, April 2 – Friday, April 6: No classes due to Spring Break

Monday, May 7 – Thursday, May 10: Exam Week