

**NORTHEASTERN TECHNICAL COLLEGE
15-WEEK COURSE OUTLINE**

COURSE:	PREFIX NO.	EFFECTIVE DATE	NEXT REVIEW DATE		
Biology	BIO 211	August 2010	August 2011		
TITLE:	CREDITS	CONTACTS			
		CLASS	- LAB	- TOTAL	
Anatomy and Physiology II	4	3	3	4	

PREREQUISITES: The student must have successfully completed BIO 210 with a grade of "C" or better.

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

TEXTBOOK(S) OR ALTERNATIVE: Hole's Anatomy & Physiology by Shier, Butler, and Lewis, 12th edition, 2009 (text)

LAB MANUAL: Photomanual and Dissection Guide to the Cat by Bohensky, 2002; handouts used in lab will be provided by the instructor electronically or by distribution in class.

MATERIALS (specifying those to be purchased by student): Latex gloves are recommended for lab and should be furnished by the student. Students may bring a lab coat if they wish. The dissection kits, safety glasses, and animals will be supplied by NETC.

COLLATERAL READING: Students may be asked to review periodical or online resources.

CLASS MANAGEMENT ACTIVITIES (Attendance, tardies, testing, etc.):
Academic Dishonesty: As stated in the Policy and Procedures Manual, any student that plagiarizes or is caught cheating on any assessment in a course will receive a zero for that assignment. The documentation will be collected and reported to the Dean of Student Services.

Attendance: 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, with the resulting grade of "F". 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 grade of "WF".

Tardies: A student is considered tardy if he or she arrives for class after the scheduled time. Three tardies constitute one hour of absence.

Electronic Devices in the Classroom:

To minimize classroom disruptions and to protect the integrity of testing, activated electronic communication devices such as pagers, beepers, and telephones are not permitted in classrooms at NETC. The only exception is for on-call emergency personnel (police, fire, EMS); these students are required to notify the instructor of their need for such devices with documentation verifying employment. This information must be provided at the beginning of the term and at the beginning of each applicable class session.

Student ID: It is mandatory that every student wear his/her student ID at all times when on the Cheraw campus.

During the first week of classes the instructor will issue a reminder to wear the ID. This reminder is a warning.

After the first week of classes, instructors are required to dismiss student without ID from class. The student may get his/her ID (or the student may go to Student Services and get a temporary stick on ID for one day for \$1.00 or a permanent one for \$3.00) and return to class before the midpoint of the class. If the student cannot get an ID and return to class by the midpoint, the instructor will record the absence.

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 *Catalog*)

RESOURCES (A-V, persons, tools/equipment): The following equipment may be used in lecture or lab settings: overhead projector, TV/VCR/DVD, computer, XGA or LCD projector, microscopes, various biological lab equipment as specified in individual labs.

COURSE TOPICAL OUTLINE (List topics and sub-topics of course) and Calendar or approximate length of time devoted to topic.

Selected topics may be covered by use of lecture, lab

exercises, filmstrips, videos, or computer simulations.

<u>CHAPTER</u>	<u>TOPICS</u>
19	Respiratory System (3 weeks)
17	Digestive System (3 weeks)
4	Cellular Metabolism (selected topics) (1 week)
18	Nutrition & Metabolism (selected topics) (1 week)
14	Blood (1 week)
15	Cardiovascular System (2 weeks)
16	Lymphatic System (1½ weeks)
20	Urinary System (1 week)
21	Water, Electrolyte, and Acid-Base Balance (1 week)
13	Endocrine System (½ week)
22 & 23	Reproductive System (½ week)

Each student will receive a copy of the syllabus with a weekly calendar and testing information on the first day of class.

TENTATIVE TOPICAL LAB SCHEDULE:

Orientation to Websites (textbook and/or Library)

Organs of the Thoracic and Oral Cavities

Ventilation & Heart Rate or Control of Breathing

Organs of the Abdominal Cavity

Digestive Enzymes

Metabolism/Vitals data collection (bp measurement, body fat index, BMR, food pyramid interpretation, etc.)

Blood

The Heart

Systemic Circulation (Major Arteries & Veins) & Fetal Circulation

Monitoring EKG

Possible field trip to hospital lab

Urogenital System

Endocrine System

Miracle of Life video & Reproductive Physiology

COURSE OBJECTIVES:

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

COLLEGE WIDE COMPETENCIES: Upon successful completion of the course, the student should be able to:

1. Collect information needed for a given application.

2. Analyze information.
3. Evaluate information to determine usefulness.
4. Apply knowledge to make decisions and solve problems.

INSTRUCTIONAL METHODS TO COMPLETE OBJECTIVES: Lectures, laboratory work, videos, and slides on topics in anatomy and physiology may be used. Science projects and reports may also be used to supplement instruction.

EVALUATIVE METHODS TO APPRAISE OBJECTIVES: Course assessments may include tests, lab reports, and other activities as outlined in the syllabus or by handouts. A comprehensive final exam will be

given. No lecture test grades will be dropped. Practical tests, objective tests, and/or lab reports may be used as assessments, with one lab test/assignment being dropped before final averaging.

CLASS AVERAGE: The final average will be based on the following:

Lecture test average	= 50%
Lab average	= 25%
Comprehensive Final Exam	= 20%
Projects, homework, or online activities	= 5%

GRADING SCALE

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