

NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE COURSE SYLLABUS

Course Title: PRINCIPLES OF THE HUMAN BODY LAB **Course #:** BIO* 110L

Course Description: 1 semester hours (2 lab hours) The laboratory to accompany BIO 110 - Principles of the Human Body lecture. Laboratory activities supplement lecture content. Principles of animal cells and human body systems will be explored. This course cannot be used as the prerequisite for BIO 211 or BIO 235.

Pre-requisite/Co-requisite: Eligibility for or completion of ENG* 101. Computer skills, including email, word processing, and web navigation **are critical** for this course.

Goals: The goal of this course is to provide students with

- An appreciation for the organization and function of human body.
- The ability to use the metric system to measure mass, volume and length.
- An overview of chemical basis of life and explanation osmosis/diffusion.
- A demonstrated understanding of the structure and function of cells.
- An demonstrated understanding of the basic principles of genetic inheritance
- A demonstrated understanding of the structure and function of a variety of tissues, digestive system, cardiovascular system, respiratory system, skeletal system, muscular system, nervous system, sensory system, urinary system, and reproductive system using slides, preserved specimens, ADAM interactive anatomy, models, diagnostic imaging and experimentation

Outcomes: Upon the completion of this course, students should be able to:

- a. Recognize metric units and use the appropriate instruments to take accurate measurement of mass, length and volume.
- b. Convert common measurements from standard to metric.
- c. Use biochemical tests to recognize the presence of carbohydrates, protein, and lipids.
- d. Use a microscope and identify its parts.
- e. Recognize various types of cells under the microscope and compare plant cells to animal cells
- f. Use a dissecting microscope to view skin, hair and nails.
- g. Describe the process of diffusion and osmosis and predict the results when a cell is placed into various solutions of different tonicity.
- h. Use ADAM, models, dissections and illustrations of the digestive system to identify various components.
- i. Demonstrate the mechanical and chemical digestion of starch in the presence of amylase.
- j. Use ADAM, models, dissections, and illustrations of the heart to identify anatomical features of the heart and major blood vessels.
- k. Demonstrate the ability to record the blood pressure on their lab partner.
- l. Recognize the effect of smoking on human lung tissue and compare the effects to those of nonsmokers using histology slides, models, ADAM interactive anatomy and chest x-rays.
- m. Use ADAM, models, dissections, and illustrations to identify anatomical features of the lungs.
- n. Identify major representative muscles and bones in the body.
- o. Describe the importance of the sense of smell on taste, identify the parts of the ear using a model and ADAM, and recognize the parts of the eye using a dissected eye, models, and ADAM.
- p. Using ADAM, models, dissections, and illustrations, locate the kidneys and other urogenital organs.
- q. Demonstrate an understanding of the process of Mendelian genetics using human monogenetic and polygenetic traits.

College Policies

Plagiarism: Plagiarism and Academic Dishonesty are not tolerated at Northwestern Connecticut Community College. Violators of this policy will be subject to sanctions ranging from failure of the assignment (receiving a zero), failing the course, being removed/expelled from the program and/or the College. Please refer to your “Student Handbook” under “Policy on Student Rights,” the Section entitled “Student Discipline,” or the College catalog for additional information.

Americans with Disabilities Act (ADA): The College will make reasonable accommodations for persons with documented learning, physical, or psychiatric disabilities. Students should notify Dr. Christine Woodcock, the Counselor for Students with Disabilities. She is located at Green Woods Hall, in the Center for Student Development. Her phone number is 860-738-6318 and her email is cwoodcock@nwcc.edu.

School Cancellations: If snowy or icy driving conditions cause the postponement or cancellation of classes, announcements will be made on local radio and television stations and posted on the College’s website at www.nwcc.edu. Students may also call the College directly at **(860) 738-6464** to hear a recorded message concerning any inclement weather closings. Students are urged to exercise their own judgment if road conditions in their localities are hazardous.

Use of Electronic Devices: Some course content as presented in Blackboard Learn is not fully supported on mobile devices at this time. While mobile devices provide convenient access to check in and read information about your courses, they should not be used to perform work such as taking tests, quizzes, completing assignments, or submitting substantive discussion posts.

Sexual Assault and Intimate Partner Violence Resource Team: NCCC is committed to creating a community that is safe and supportive of people of all gender and sexual identities. This pertains to the entire campus community, whether on ground or virtual, students, faculty, or staff.

Sexual assault and intimate partner violence is an affront to our national conscience, and one we cannot ignore. It is our hope that no one within our campus community will become a victim of these crimes. However, if it occurs, NCCC has created the SART Team - Sexual Assault and Intimate Partner Violence Resource Team - to meet the victim’s needs.

SART is a campus and community based team that is fully trained to provide trauma-informed compassionate service and referrals for comprehensive care. The team works in partnership with The Susan B. Anthony Project to extend services 24 hours a day, 7 days a week throughout the year.

The NCCC team members are:

Ruth Gonzalez, Ph.D.	860-738-6315	Green Woods Hall Room 207
Susan Berg	860-738-6342	Green Woods Hall Room 223
Kathleen Chapman	860-738-6344	Green Woods Hall Room 110
Michael Emanuel	860-738-6389	Founders Hall Annex Room 308
Seth Kershner	860-738-6481	Library
Jane O’Grady	860-738-6393	Founders Hall Annex Room 212
Robin Orloski	860-738-6416	Business Office Room 201
Patricia Bouffard, Ex-Officio	860-738-6319	Founders Hall Room 103
Savannah Schmitt		Student Representative

At NCCC we care about our students, staff and faculty and their well-being. It is our intention to facilitate the resources needed to help achieve both physical and emotional health.