

HUMAN ANATOMY & PHYSIOLOGY I BIO 141 Online

INSTRUCTOR INFORMATION

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Office hours: Monday: 9 am to 10 am; 11:15 am to 12:15 pm

Tuesday: 11 am to 12 pm; 1:30 pm to 2 pm
Wednesday: 9 am to 10 am; 11:15 am to 12:15 pm
Thursday: 11 am to 12 pm; 1:30 pm to 2 pm
Friday: 9 am to 10 am; 12:30 pm to 2:30 pm
Other face-to-face meetings available by appointment

COURSE DESCRIPTION

Description: Integrates anatomy and physiology of cells, tissues, organs, and systems of the

human body. Integrates concepts of chemistry, physics, and pathology

Prerequisite: None

Credits: 4

Proctored Assessments: 5 Mandatory LAB Meetings in Godbey 183, Dublin

Online Activities: Required

COURSE MATERIALS

Textbook: Hole's Human Anatomy & Physiology, Shier, D., et. al., 13th ed., 2013

Lab Manual: Laboratory Manual for Human Anatomy & Physiology: Main Version, Martin T. R.,

2nd ed. 2013

Note: NRCC assumes no liability for virus, loss of data, or damage to software or computer when a student downloads software for classes.

Additional resource materials for some NRCC classes can be found on the NRCC Web-based learning site at www.nr.edu/learninglinks.

The Student's Guide to Distance Education is available at http://www.nr.edu/de/pdf/stuguide.pdf.

I. COURSE INFORMATION

Prepared By: Amy Dawson Approved By: Mrs. Carol Hurst

A. INTRODUCTION

This is a Distance Education course designed specifically for those students whose learning styles are best served by providing instructional opportunities beyond the traditional classroom setting.

Biology 141 is the first semester of a two-semester sequence (BIO 141-142) that provides a comprehensive and systematic study of the anatomy and physiology of the human body. It provides fundamental information on cell structure and cellular processes, a description of the structure and general role of organic compounds important in human nutrition and metabolism; and a detailed study of the anatomy and physiology of the cells, tissues, and organs of the Integumentary, Skeletal, Muscular, and Nervous systems of the human body.

B. COURSE OBJECTIVES

A student who earns a "C" or higher in this course will be able to:

- A. Demonstrate the ability to communicate scientific information and theory in writing.
- B. Interpret scientific graphs, tables and charts.
- C. Explain the basic body plan of the human organism and identify anatomical structures in human and animal specimens and models.
- D. Use the microscope and other basic laboratory equipment.
- E. Demonstrate the ability to use computerized methods to study science.
- F. Apply concepts of human anatomy and physiology to real situations.
- G. Apply basic concepts of physical science to the human body.
- H. Define homeostasis and describe its role in human function.
- I. Define the term metabolism and explain how it is regulated at various levels in the body.
- J. Describe and identify structural and functional relationships in the human body.
- K. List the levels of biological organization and apply them to the study of human anatomy and physiology.
- L. Describe and identify the structure and function of various cell types in the body.
- M. Compare and contrast aerobic and anaerobic forms of cellular respiration.
- N. Name the four basic tissue types in the body and recognize them microscopically and/or photographically.
- O. Describe the structure and function of the integumentary system.
- P. Describe the structure and function of the skeletal system, including the joints.
- Q. Describe the structure and function of the muscular system.
- R. Describe the structure and function of the nervous system.
- S. Demonstrate critical thinking skills by utilizing the knowledge gained from meeting the previous goals.

C. COURSE CONTENT

The following concepts will be explored in detail:

- 1. The organization of the human body and use of appropriate anatomical terminology used to describe the relative position of the body's parts, body sections, and body regions.
- 2. The basic structure of matter and the chemical constituents of cells.
- 3. The chemical composition and life cycle of a cell and various processes of chemical movement across cell membranes.
- 4. The control of metabolic reactions.
- 5. The function and physical characteristics of epithelial, connective, muscle and nervous tissues.
- 6. The organization of the skeletal system and the major features of the individual bones; development, growth and function of bones; the types of joints; and the clinical terms related to the skeletal system.
- 7. The structure and function of skeletal, smooth and cardiac muscle; the physiology of muscle cell contraction; the names of the major muscles as well as the origin, insertion and action of the major skeletal muscles; and the clinical terms related to the muscular system and its functions.
- 8. The structure and function of the nervous system including the organization of the brain and nerve tissue; various types of neurons and nerves and their pathways; the physiology of nerve impulses; and the structures, locations and functions of the somatic senses and special senses.

D. **GRADING/EVALUATION**

1. The final grade for the course will be determined as follows:

Introductory Quiz	20 points
Lecture Quizzes (9 total; lowest lecture quiz grade will be	80 points; 10 points each
dropped)	
Lecture Tests (5 total)	400 points; 80 points each
Final Comprehensive Lecture Exam	200 points
Lab Quizzes (10 total; lowest lab quiz grade will be	90 points; 10 points each
dropped)	
Lab Practical Exams (3 total)	120 points; 40 points each
Final Lab Practicum (Comprehensive)	90 points
Total Points	1000 points

2. Grading Scale:

Α	900 to 1000 points
В	800 to 899 points
С	700 to 799 points
D	600 to 699 points
F	599 points and below

3. If you do not complete the first 2 projects by the stated deadline, you will be withdrawn from the course for inadequate participation.

- 4. Make-ups for tests, quizzes or lab practicums are not permitted. If you must miss a mandatory lab meeting in which a lab practicum is being administered, the final, comprehensive lab practicum will count twice to replace the missed practicum score.
- 5. Common Sense Reminders: If you are interested in making a decent grade in this course, you should expect to spend a minimum of 6 to 12 hours per week outside of class time studying the textbook, lab manual, lab videos, and any pertinent information posted on Blackboard. The material is difficult and there is a lot to understand in a short amount of time. DO NOT CRAM! You earn the grade you get and you will get out of this class what you put into it. This class will absolutely take effort. I strongly suggest forming study groups, doing team quizzes, making flash cards, physically writing out answers to questions on the study guides, contacting Academic Assistance in 109 Martin Hall for tutoring, and anything else that will help you remember and understand the material. I am happy to help you learn as much as you want, but this is your class and your grade; I am just the instigator for your learning pathways. ALWAYS ask questions when you have them and feel free to contact me if you are having any problems understanding the course material!

E. <u>WITHDRAWAL POLICY</u>

Student Initiated Withdrawal Policy

A student may drop or withdraw from a class without academic penalty during the first sixty percent (60%) of a session. For purposes of enrollment reporting, the following procedures apply:

- a. If a student withdraws from a class prior to the termination of the add/drop period for the session, the student will be removed from the class roll and no grade will be awarded.
- b. After the add/drop period, but prior to completion of sixty percent (60%) of a session, a student who withdraws or is withdrawn from a course will be assigned a grade of "W." A grade of "W" implies that the student was making satisfactory progress in the class at the time of withdrawal, that the withdrawal was officially made before the deadline published in the college calendar, or that the student was administratively transferred to a different program.
- c. After that time, if a student withdraws from a class, a grade of "F" will be assigned. Exceptions to this policy may be made under documented mitigating circumstances if the student was passing the course at the last date of attendance.

A retroactive grade of "W" may be awarded only if the student would have been eligible under the previously stated policy to receive a "W" on the last date of class attendance. The last date of attendance for a distance education course will be the last date that work was submitted.

Late withdrawal appeals will be revised and a decision made by the Coordinator of Student Services.

No-Show Policy

A student must either attend face-to-face courses or demonstrate participation in distance learning courses by the last date to drop for a refund. A student who does not meet this

deadline will be reported to the Admissions and Records Office and will be withdrawn as a no-show student. No refund will be applicable, and the student will not be allowed to attend/participate in the class or submit assignments. Failure to attend or participate in a course will adversely impact a student's financial aid award.

Instructor Initiated Withdrawal

Since attendance is not a valid measurement for Distance Education (DE) courses, a student may be withdrawn due to non-performance. A student should refer to his/her DE course plan for the instructor's policy.

In accordance with the No-Show Policy, a student who has not attended class or requested/accessed distance learning materials by the last day to drop the class and receive a refund must be withdrawn by the instructor during the following week. No refund will be applicable.

The student will be notified of the withdrawal by the Admissions and Records Office. An appeal of reinstatement into the class may be approved only by the instructor.

F. CHEATING/PLAGIARISM POLICY

To plagiarize is "To use and pass off as one's own the ideas or writings of another." (Definition adapted from the <u>American Heritage Dictionary</u>.) Remember that plagiarism includes lifting words or ideas from Internet sites, as well as copying from print sources.

No form of cheating will be tolerated. Anyone caught cheating will receive an "F" for the course. Cheating includes either taking or receiving information from another student during graded assignments or from attempting to use notes (hidden or otherwise) during tests and quizzes. If you attempt to do such things, you do not belong at NRCC or in the professional world.

G. DIVERSITY STATEMENT

The NRCC community values the pluralistic nature of our society. We recognize diversity including, but not limited to, race, ethnicity, religion, culture, social class, age, gender, sexual orientation and physical or mental capability. We respect the variety of ideas, experiences and practices that such diversity entails. It is our commitment to ensure equal opportunity and to sustain a climate of civility for all who work or study at NRCC or who otherwise participate in the life of the college.

New River Community College does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Dr. Mark C. Rowh, Vice President for Workforce Development and External Relations, 217 Edwards Hall, 540-674-3600, ext. 4241.

H. <u>DISABILITY STATEMENT</u>

If you are a student with a documented disability who will require accommodations in this course, please register with the Center for Disabilities Services located in the Counseling Center in Rooker Hall for assistance in developing a plan to address your academic needs.