

**NEOSHO COUNTY COMMUNITY COLLEGE
MASTER COURSE SYLLABUS**

COURSE IDENTIFICATION

Course Code/Number: ALMA 125

Course Title: Human Body in Health and Disease

Division: Applied Science (AS) Liberal Arts (LA) Workforce Development (WD)
 Health Care (HC) Lifetime Learning (LL) Nursing Developmental

Credit Hour(s): 3

Effective Date: Fall 2013

Assessment Goal Per Outcome: 70%

COURSE DESCRIPTION

This course utilizes a body systems approach to focus on diseases that are frequently first diagnosed and treated in the medical office setting. Students learn to recognize the causes, signs and symptoms of diseases of the major body systems as well.

MINIMUM REQUIREMENTS/PREREQUISITES AND/OR COREQUISITES

None.

TEXTS

The official list of textbooks and materials for this course is found on [myNeosho](http://www.neosho.edu/ProspectiveStudents/Registration/CourseSyllabi.aspx).

<http://www.neosho.edu/ProspectiveStudents/Registration/CourseSyllabi.aspx>

GENERAL EDUCATION OUTCOMES

1. Practice Responsible Citizenship through:
 - identifying rights and responsibilities of citizenship,
 - identifying how human values and perceptions affect and are affected by social diversity,
 - identifying and interpreting artistic expression.

2. Live a healthy lifestyle (physical, intellectual, social) through:
 - listing factors associated with a healthy lifestyle and lifetime fitness,
 - identifying the importance of lifetime learning,
 - demonstrating self-discipline, respect for others, and the ability to work collaboratively as a team.
3. Communicate effectively through:
 - developing effective written communication skills,
 - developing effective oral communication and listening skills.
4. Think analytically through:
 - utilizing quantitative information in problem solving,
 - utilizing the principles of systematic inquiry,
 - utilizing various information resources including technology for research and data collection.

COURSE OUTCOMES/COMPETENCIES (as Required)

At the end of this course, a student should be able to do the following:

- 1) Apply concepts related to the organization of the human body.**
 - a. List and define the main directional terms, planes and subdivisions for the body.
 - b. Define anatomy, physiology and pathology.
 - c. Describe the organization of the human body from chemicals to a whole organism.
 - d. List groups of tissues and membranes.
 - e. Define homeostasis.
 - f. Differentiate between atoms, molecules, compounds, enzymes, acids, bases, bonds and mixtures.
 - g. Compare functions of RNA in cells and DNA.
 - h. List groups of tissues and membranes.
- 2) Evaluate disease-producing organisms and the skin as a first line of defense.**
 - a. Apply medical terminology to the disease process in the human body.
 - b. Differentiate between sterilization, disinfection and antisepsis.
 - c. Analyze the causes, signs and symptoms, diagnosis, treatment, and prevention of diseases and disorders of the integumentary system and its layers.
- 3) Recognize healthy human body and disease processes related to the musculoskeletal system.**
 - a. List and describe the function of bones and cell types.
 - b. Compare three types of muscle tissue and how muscles contract.
 - c. Analyze the causes, signs and symptoms, diagnosis, treatment, and prevention of diseases and disorders of the musculoskeletal system and recognize its structures.
- 4) Analyze the healthy human body and disease processes related to the special senses, endocrine and nervous systems.**
 - a. Describe parts of the brain and spine.
 - b. Analyze the causes, signs and symptoms, diagnosis, treatment, and prevention of diseases and disorders of the sensory system.
Analyze the causes, signs and symptoms, diagnosis, treatment, and prevention of diseases and disorders of the endocrine system and identify its basic structures.

- c. Analyze the causes, signs and symptoms, diagnosis, treatment, and prevention of diseases and disorders of the nervous system and identify its basic structures.

5) Determine healthy human body and the disease processes related to the cardiovascular, blood, lymph and immune systems.

- a. List the functions of the blood and main components.
- b. Analyze blood circulation through the body and the effects of the autonomic nervous system on the heart.
- c. Differentiate between the types of blood vessels, structure and function.
- d. List the functions of the lymphatic system.
- e. Differentiate between antigens and antibodies.
- f. Analyze the causes, signs and symptoms, diagnosis, treatment, and prevention of diseases and disorders of the blood, lymph, heart, vessels, circulation and immune systems and identify its main structures.

6) Determine healthy human body and disease processes related to the respiratory, digestive, metabolic and urinary systems.

- a. Identify the four phases of respiration.
- b. Describe the processes of internal and external gas exchange.
- c. List the hormones and enzymes involved in regulating and assisting in digestion.
- d. Differentiate between catabolism and anabolism.
- e. Define metabolic rate and factors that affect it.
- f. Explain how carbohydrates, fats and proteins are metabolized.
- g. Compare intracellular and extracellular fluids
- h. Analyze the causes, signs and symptoms, diagnosis, treatment, and prevention of diseases and disorders of the respiratory system and identify its structures.
Analyze the causes, signs and symptoms, diagnosis, treatment, and prevention of diseases and disorders of the digestive system and identify its structures.
- i. Analyze the causes, signs and symptoms, diagnosis, treatment, and prevention of diseases and disorders of the urinary system and identify its structures.

7) Recognize healthy human body and disease processes related to the reproductive systems.

- a. Describe fertilization and early development of the fertilized egg.
- b. Differentiate between dominant and recessive genes.
- c. Explain meiosis and mutation.
- d. Analyze genetic disorders.
- e. Analyze the causes, signs and symptoms, diagnosis, treatment and prevention of diseases and disorders of the reproductive systems and identify the structures.

MINIMUM COURSE CONTENT

The following topics must be included in this course. Additional topics may also be included.

Module 1: Organization of the Human Body

Module 2: Chemistry, Matter and Life

Module 3: Cells and Their Function

Module 4: Tissues, Glands and Membranes

Module 5: Disease and Disease-Producing Organisms
Module 6: The Integumentary System
Module 7: The Skeletal System
Module 8: The Muscular System
Module 9: The Nervous System: Spinal Cord and Nerves
Module 10: The Nervous System: Brain and Cranial Nerves
Module 11: The Sensory System
Module 12: The Endocrine System: Glands and Hormones
Module 13: The Blood
Module 14: The Heart and Heart Disease
Module 15: The Blood Vessels and Circulation
Module 16: The Lymphatic System and Lymphoid Tissue
Module 17: Immunity
Module 18: The Respiratory System
Module 19: The Digestive System
Module 20: Metabolism, Nutrition and Temp
Module 21: Body Fluids
Module 22: The Urinary System
Module 23: The Reproductive System
Module 24: Development and Birth
Module 25: Heredity and Hereditary Diseases

STUDENT REQUIREMENTS AND METHOD OF EVALUATION

The instructional method is designed for the online platform, so a reliable internet provider and computer are required for success in the course. In addition to chapter readings, students will be asked to complete testing in the publishers PrepU platform to better identify what concepts the student needs additional time mastering; additional instructions are provided in the course. Methods of evaluation may include but are not limited to: internet lecture, collaborative projects, internet activities, supplemental reading assignments, chapter reviews, case studies, exams and participation in threaded discussions with other classmates on topics determined by the instructor.

A = 90 to 100%

B = 80 to 89%

C = 70 to 79%

D = 60 to 69%

F = 59% and below

The weight distribution of the assignments will be determined at the beginning of each semester with the midterm and finals being weighted heavier than weekly course assignments.

ASSESSMENT OF STUDENT GAIN

The purpose of assessing student learning at Neosho County Community College is to ensure the educational purposes of the institution are met and appropriate changes are made in program development and classroom instruction to allow for student success. The instructor(s) of this course will

determine the methods of assessment most appropriate and complete an assessment report at the end of the course.

Attendance Policy

1. NCCC values interactive learning which promotes student engagement in the learning process. To be actively engaged, the student must be present in the learning environment.
2. Unless students are participating in a school activity or are excused by the instructor, they are expected to attend class. If a student's absences exceed one-eighth of the total course duration, (which equates to one hundred (100) minutes per credit hour in a face-to-face class) the instructor has the right, but is not required, to withdraw a student from the course. Once the student has been dropped for excessive absences, the registrar's office will send a letter to the student, stating that he or she has been dropped. A student may petition the chief academic officer for reinstatement by submitting a letter stating valid reasons for the absences within one week of the registrar's notification. If the student is reinstated into the class, the instructor and the registrar will be notified. Please refer to the Student Handbook/Academic Policies for more information
3. Absences that occur due to students participating in official college activities are excused except in those cases where outside bodies, such as the State Board of Nursing, have requirements for minimum class minutes for each student. Students who are excused will be given reasonable opportunity to make up any missed work or receive substitute assignments from the instructor and should not be penalized for the absence. Proper procedure should be followed in notifying faculty in advance of the student's planned participation in the event. Ultimately it is the student's responsibility to notify the instructor in advance of the planned absence.

ACADEMIC INTEGRITY

NCCC expects every student to demonstrate ethical behavior with regard to academic pursuits. Academic integrity in coursework is a specific requirement. Definitions, examples, and possible consequences for violations of Academic Integrity, as well as the appeals process, can be found in the College Catalog, Student Handbook, and/or Code of Student Conduct and Discipline.

ELECTRONIC DEVICE POLICY

Student cell phones and other personal electronic devices not being used for class activities must not be accessed during class times unless the instructor chooses to waive this policy.

NOTE

Information and statements in this document are subject to change at the discretion of NCCC. Students will be notified of changes and where to find the most current approved documents.

ACCOMMODATIONS

If you are a student with a disability who may need accommodation(s), in compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990, please notify the Dean of Student Services in the Student Services Office, Sanders Hall, 620-432-0304, on the Chanute Campus, or the Dean for the Ottawa and Online Campuses, 785-248-2798, on the Ottawa Campus as soon as possible. You will need to bring your documentation for review in order to determine reasonable accommodations, and then we can assist you in arranging any necessary accommodations.

NON-DISCRIMINATION POLICY

The following link provides information related to the non-discrimination policy of NCCC, including persons with disabilities. Students are urged to review this policy.

<http://www.neosho.edu/Departments/NonDiscrimination.aspx>

SEXUAL MISCONDUCT POLICY (TITLE IX)

At NCCC, it is the responsibility of an instructor to help create a safe learning environment in the classroom, including both physical and virtual classrooms. All instructors are considered mandatory reporters at NCCC, therefore any information regarding sexual misconduct that is shared by a student in one-on-one meetings with the instructor must be reported to appropriate personnel at the College. Instructors will keep the information private to the greatest extent possible, but it is not confidential. Generally, climate surveys, classroom writing assignments or discussions, human subjects research, or events such as Take Back the Night events do not provide notice that must be reported to the Coordinator by employees, unless the reporting party clearly indicates that they wish a report to be made.

The following link provides information related to the sexual misconduct policy of NCCC, including resources, reporting options, and student rights. Students are urged to review this policy.

<http://www.neosho.edu/TitleIX.aspx>

COURSE NOTES

Please see Syllabus Supplement for any additional course details.