

Northwest Arkansas Community College
Division of Health Professions

Discipline Code

EMTP

Course Number

2002

Course Title

Paramedic Body Organs and Their Functions Lab

Catalog Description

Human body systems and their functions at the paramedic level will be taught. This course will supplement the knowledge base already attained by the student in regard to human body science. During this lab students will assess, monitor, and explain advanced level body functions and their affect as related to diseases and illness on real and animated human patients.

Prerequisite

Admission by acceptance into the Paramedic Program only.

Credit Hours

2 credit hours

Contact hours

32 lecture contact hours

Load hours

6 load hours

Semesters Offered

On Demand

ACTS Equivalent

Non-Transferable Course

Grade Mode

A-F

Learning Outcomes

1. Discuss the importance of human anatomy as it relates to the paramedic profession.
2. On a simulated patient, demonstrate the anatomic position.
3. Properly interpret anatomic directional terms and body planes.
4. List the structures that compose the axial and appendicular regions of the body.

5. Define the divisions of the abdominal region.
6. On a simulated patient, identify in detail the contents of the three major body cavities.
7. Differentiate and, on a simulated patient, demonstrate the following tissue types: epithelial tissue, connective tissue, muscle tissue, and nervous tissue.
8. For each of the 11 major organ systems in the human body, label a diagram of anatomic structures
9. List the functions of the major anatomic structures, and explain how the organs of the system interrelate to perform the specific functions of that system.
10. For the special senses, label a diagram of the anatomic structures of the special senses, list the functions of the anatomic structures of each sense, and explain how the structures of the senses interrelate to perform their specialized functions.
11. On a simulated patient, demonstrate the normal characteristics of the cellular environment and the key homeostatic mechanisms that strive to maintain an optimal fluid and electrolyte balance.
12. Outline pathophysiologic alterations in water and electrolyte balance and list their effects on body functions.
13. On a simulated patient, identify and demonstrate the treatment of patients with particular fluid or electrolyte imbalances.
14. On a simulated patient, correct the mechanisms in the body that maintain abnormal acid–base balance.
15. Identify the pathophysiologic alterations in acid–base balance and their causes on a simulated patient.
16. On a simulated patient, identify the management of a patient with an acid–base imbalance.
17. On a simulated patient, identify the changes in cells and tissues that occur with cellular adaptation, injury, neoplasia, aging, or death.
18. Outline the effects of cellular injury on local and systemic body functions.
19. Outline the causes, adverse systemic effects, and compensatory mechanisms associated with hypoperfusion.
20. On a simulated patient, demonstrate the ways in which the inflammatory and immune mechanisms respond to cellular injury or antigenic stimulation.
21. On a simulated patient, identify and elaborate on the impact of stress on the body's response to illness or injury.
22. On a simulated patient, identify factors that influence disease.
23. On a simulated patient, identify changes in body functions that can occur as a result of genetic and familial disease factors given specific symptoms.

General Education Outcomes Supported

- Students develop higher order thinking skills.
- Students demonstrate information literacy.

Standard Practices

Topics

Assessments

written quizzes, homework and exams

Grading guidelines

Practical Exams on simulated patients and unit exams will make up the total points for grading.

Revision Date

6/21/2022