

Northwest Arkansas Community College
Division of Health

Discipline Code

EMTP

Course Number

1002

Course Title

Paramedic Body Organs and Their Functions Lecture

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.

Prerequisite

Admission by acceptance into the Paramedic Program only

Credit Hours

2 credit hours

Contact hours

32 lecture contact hours

Load hours

2 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. Describe 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. Describe in detail the contents of the three major body cavities.
7. Discuss the functions of the following cellular structures: the cytoplasmic membrane, the cytoplasm (and organelles), and the nucleus.
8. Describe the process by which human cells reproduce.
9. Differentiate and describe the following tissue types: epithelial tissue, connective tissue, muscle tissue, and nervous tissue.
10. For each of the 11 major organ systems in the human body, label a diagram of anatomic structures
11. 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.
12. 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.
13. Describe the normal characteristics of the cellular environment and the key homeostatic mechanisms that strive to maintain an optimal fluid and electrolyte balance.
14. Outline pathophysiologic alterations in water and electrolyte balance and list their effects on body functions.
15. Describe the treatment of patients with particular fluid or electrolyte imbalances.
16. Describe the mechanisms in the body that maintain normal acid–base balance.
17. Outline pathophysiologic alterations in acid–base balance.
18. Describe the management of a patient with an acid–base imbalance.
19. Describe the changes in cells and tissues that occur with cellular adaptation, injury, neoplasia, aging, or death.
20. Outline the effects of cellular injury on local and systemic body functions.
21. Outline the causes, adverse systemic effects, and compensatory mechanisms associated with hypoperfusion.
22. Describe the ways in which the inflammatory and immune mechanisms respond to cellular injury or antigenic stimulation.
23. Explain how changes in immune status and the presence of inflammation can adversely affect body functions.
24. Describe the impact of stress on the body’s response to illness or injury.
25. Describe factors that influence disease.
26. Describe changes in body functions that can occur as a result of genetic and familial disease factors.

General Education Outcomes Supported

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

Standard Practices

Topics

Assessments

Students will be assessed by written quizzes, homework and exams

Grading guidelines

Written quizzes and unit exams will make up the total points for grading.

Revision Date 6/21/2022