

Introduction to Module 11: Reproductive System, Pregnancy & Human Development, & Heredity

Module 11 Overview

Module 11 will cover a review of the reproductive system, pregnancy and human development, and heredity.

Outcomes: The following outcomes were designed to ensure student success on the exam.

Medical Terminology/Anatomy & Physiology Module 11 Student Outcomes:

1. Describe the common function of the male and female reproductive systems.
2. Using a model or diagram, identify the organs and accessory organs of the male and female reproductive systems and discuss the general function of each.
3. Know the process of meiosis to the extent of comparing and contrasting it to mitosis.
4. Outline the process of spermatogenesis.
5. Discuss hormonal regulation of testicular function and the physiological effects of testosterone on the male reproductive anatomy.
6. Trace the pathway of sperm cells from their site of formation to the body exterior.
7. Describe the phases of the ovarian cycle and relate them to events of oogenesis.
8. Describe how hormones control the activities of female reproductive organs and the development of female secondary sex characteristics.
9. Discuss the structure and function of the mammary glands.
10. Describe the process of fertilization and the changes of the female body during pregnancy.
11. Understand the major functions of the placenta.
12. Explain how labor is initiated and describe the three stages of labor.
13. Describe the stages of human embryology and gestation including investigation of gestational and congenital disorders.
14. Discuss several agents that can interfere with normal fetal development.
15. Distinguish among the modes of inheritance and describe the events that lead to genetic variability of gametes.
16. List and explain several techniques used to determine or predict genetic diseases.
17. Explain how gender of offspring is determined.
18. Explain nondisjunction and identify a common disorder resulting from nondisjunction.
19. Discuss the interaction between heredity and the environment.

Length of Module: 1 week (minimum 16 hours)

Resources needed

Required A&P textbook and accompanying workbook, Medical-Terminology textbook, online resources, computer/digital device with internet access, use of Canvas learning management system (LMS), and embedded videos.

Read

Thompson, Gale, Understanding Anatomy and Physiology, 2nd Edition, Chapter 23, "Reproductive Systems," Chapter 24, "Pregnancy & Human Development," and Chapter 25, "Heredity."

Finnegan, L., & Eagle, S. Medical Terminology in a Flash! A Multiple Learning Styles Approach., 3rd Edition, Chapter 11, "Reproductive System."

Assessment

Review session preparation/participation (6 hrs)

Module 11 Objective Assignment (4 hrs)

Module 11 Practice Test Assignment (2 hrs)

Module 11 Study Session Assignment (1 hr)

Module 11 Study Skills Assignment (1 hr)

Microsoft Teams Tutorial (1 hr)

Module 11 exam delivered via Canvas LMS (1 hr)