



# Introduction to Health Science

*This course is designed to create an awareness of career possibilities in health care and inform students of the educational options available for health science and health technology programs. Instruction includes beginning anatomy and physiology, medical terminology, medical ethics, diseases, and disorders. The course prepares students for the Medical Anatomy/Physiology course and/or for a variety of health technology programs.*

**Grades 9-12**

**Semester (Full Year if combined with Health)**

**State Certification Skills Test # 700**

***INTRODUCTION-Students will explore the fundamental aspects of Healthcare and math.***

Standard 1 Identify how math is used in the medical field.

- Demonstrate use of the 24-hour clock/military time.
- Demonstrate competency in basic math skills as they relate to healthcare (averages, ratios, fractions, percentages, addition, subtraction, multiplication, division).
- Demonstrate the ability to convert units of height, weight, and temperature.
- Demonstrate the ability to use the metric system.

Standard 2 Describe anatomical position and the role it plays in human anatomy.

- Define anatomical position.
- Identify body planes.

***SUPPORT SYSTEMS-Students will explore aspects of the body systems related to support.***

Standard 1 Identify the basic functions of the skeletal system.

Standard 2 Explore the basic structure of the skeleton.

Standard 3 Describe the diseases and disorders associated with the skeletal system.

Standard 4 Describe the basic functions of the muscular system.

Standard 5 Explore the basic structure of the muscular system.

Standard 6 Describe the disease and disorders associated with the muscular system.

Standard 7 Describe the basic functions of the integumentary system.

Standard 8 Identify the layers of the skin and appendages.

Standard 9 Describe the disease and disorders associated with the integumentary system.





***TRANSPORTATION SYSTEMS-Students will explore aspects of the body systems related to transportation.***

Standard 1 Describe the basic functions of the circulatory system.

Standard 2 Identify the basic structures and functions of the heart, blood vessels, and blood.

Standard 3 Describe the diseases and disorders associated with the circulatory system.

Standard 4 Identify the basic functions of the respiratory system.

Standard 5 Identify basic structures of the respiratory system.

Standard 6 Describe the diseases and disorders associated with the respiratory system.

Standard 7 Describe the basic function and structures of the immune system.

***REGULATORY SYSTEMS-Students will explore aspects of the body systems related to regulation.***

Standard 1 Identify the basic functions of the nervous system.

Standard 2 Identify the basic structures and functions of the nervous system.

Standard 3 Describe the diseases and disorders associated with the nervous system.

Standard 4 Describe the special senses.

Standard 5 Identify the basic structures of the special sense organs and their functions.

Standard 6 Describe the diseases and disorders of the special senses.

Standard 7 Identify the basic functions of the endocrine system.

Standard 8 Identify the location of the following glands and the function of the hormones they release.

Standard 9 Describe the disease and disorders of the endocrine system.

***MAINTENANCE SYSTEMS-Students will explore aspects of the body systems related to maintenance.***

Standard 1 Describe the basic functions of the digestive system.

Standard 2 Describe the location and basic functions of the digestive organs.

Standard 3 Describe the diseases and disorders of the digestive system.

Standard 4 Describe the basic functions of the urinary system.

Standard 5 Identify the basic organs, location, and functions of the urinary system.





## DAVIS ESSENTIAL SKILLS & KNOWLEDGE

Standard 6 Describe the diseases and disorders of the urinary system

### ***REPRODUCTIVE SYSTEM-Students will explore aspects of the human reproductive system.***

Standard 1 Describe the functions of the reproductive system.

Standard 2 Describe the structures, location, and function of the female reproductive system.

Standard 3 Describe the structures, location, and function of the male reproductive system.

Standard 4 Describe the diseases and disorders of the reproductive system

### ***INTRODUCTION-Students will explore the fundamental aspects of Healthcare.***

Standard 1 Compare and contrast the history of medicine with current trends.

Standard 2 Investigate the various aspects of health insurance.

Standard 3 Summarize basic professional standards and characteristics of healthcare workers.

Standard 4 Discuss desirable attitudes and behaviors when providing healthcare to diverse patients.

Standard 5 Compare and contrast the health science career pathways.

Standard 6 Demonstrate knowledge of medical law and medical ethics.

Differentiate between medical law and medical ethics

Standard 7 Identify how math is used in the medical field.

Standard 8 Describe anatomical position and the role it plays in human anatomy.

### ***PERFORMANCE SKILLS***

Identify Choose one health science career and create a presentation to explain the job description, outlook, salary, skills work environment and certification /licensure.

Choose one disease/disorder and prepare and oral and/or written report/presentation.

