

ORIENTATION TO HEALTH SCIENCE (490024)

Orientation to Health Science is a one credit course to assist students in making informed decisions regarding their college and career goals. Students will be given the opportunity to apply knowledge and skills related to the Health Science cluster. The course also includes information concerning the practices for promoting health, wellness, and disease prevention. Instruction and learning activities are provided in a classroom laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

Career and technical student organizations are integral, co-curricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Students will:

Healthcare Service

1. Recognize progress in healthcare service.
 - Compare medical progress from early times to the present. For example: surgical techniques, anesthesia, treatment and equipment
 - Discuss healthcare leaders who brought about change and progress from early times to the present

Role of Science in Healthcare

2. Demonstrate an understanding of the sciences in the healthcare field.
 - Demonstrate knowledge of how the scientific method and advances in science have impacted beliefs and practices from ancient times to the present
 - Recognize the role science has in the health field
 - Identify the various science educational courses required by various health related occupations

Communication and Leadership Skills

3. Demonstrate communication and leadership skills.
 - Recognize the role and use of terminology and abbreviations used in various health related careers
 - Construct effective arguments and convey intricate or multifaceted information through participation in HOSA-Future Health Professionals
 - Discern a speaker's key points, request clarification, and ask relevant questions through opportunities within HOSA

Occupational Safety

4. Demonstrate occupational safety.
 - Discuss occupational safety issues that relate to the employer, employee, and the patient in the health care setting
 - Demonstrate health safety habits that will prevent injury to health care workers, co-workers, and patients
 - Show an awareness of the importance of identifying poisons and hazardous materials commonly found in the workplace
 - Describe the importance of fire safety including prevention and evacuation
 - Understand the importance of identifying, reducing, eliminating and reporting hazards associated with work
 - Demonstrate understanding of the Occupational Safety and Health Act of 1970 (OSH Act of 1970)
 - Research the workplace safety and health standards set by the Occupational Safety and Health Administration (OSHA)

Mathematical Calculations and Problem Solving

5. Perform basic mathematical calculations and demonstrate problem solving skills used in healthcare.
 - Describe the importance of why accurate calculations and effective problem solving skills are required in healthcare
 - Identify and perform appropriate numeric procedures with problems found in numeric, symbolic, or word form as they relate to healthcare
 - Convert common weights, measure, and volumes to metric as applied in the healthcare setting

Life Stages and Health Care Needs

6. Identify life stages and the health care needs of each stage.
 - Describe common health care needs from birth to death
 - Research various disease processes throughout the lifespan and the effects on quality of life
 - Discuss health education needs for special populations

Health and Wellness

7. Explore the multiple facets of health, wellness, and disease.
 - Demonstrate an understanding of the risk factors that contribute to illness
 - Identify ecological issues that affect wellness
 - Describe how cultural and individual differences relate to wellness and quality of life and how these differences impact health problems of society
 - Describe strategies for prevention of diseases including health screenings and examinations

- Discuss the adverse effects of alcohol, tobacco, and drugs on the human body and strategies to prevent addiction
- Explain basic concepts of positive self-image, body and mental wellness and the effects of stress
- Explore basic information on the dangers of bloodborne diseases in healthcare including but not limited to HIV/AIDS and Hepatitis B
- Explore the need for proper nutrition and water intake to maintain wellness, such as www.ChooseMyPlate.gov

Healthcare Professions

8. Research various professions and careers within the health science cluster
 - Identify career opportunities within healthcare
 - Determine educational requirements for selected career pathways within the health science cluster
 - Investigate credentialing and certifications related to selected health career pathways

Basic Healthcare Skills

9. Perform basic healthcare skills.
 - Measure, record, and graph patient data to include height, weight, temperature, pulse, respiration, and intake and output of body fluids
 - Demonstrate medical aseptic technique by hand washing, gloving, and application of mask and gown
 - Perform proper body mechanics to prevent self and patient injuries
 - Demonstrate basic first aid skills, rescue breathing, and Cardiopulmonary Resuscitation (CPR)
 - Demonstrate an awareness of safe patient transfer techniques
 - Explore various ambulatory assistive devices and recognize the importance of patient safety instructions regarding use, such as wheelchair, crutches, and walker