MODULE DESCRIPTION

This module provides students with opportunities to examine the ways health sciences professionals provide client care in each of the five health science career pathways. Through classroom learning experiences, students will identify similarities and differences in client care responsibilities across health services career pathways. Students will understand the stages in the human lifespan and describe how development impacts body systems and client health status. Students will explore future career possibilities by identifying the knowledge, skills, education, and training necessary for providing client care in specific health science careers.

GUIDING QUESTION

What personal skills, abilities, and aptitudes do health sciences professionals need to provide appropriate client care through careers in each health science career pathway?

MODULE CONTENT

1. HISTORY OF HEALTH CARE

STUDENTS WILL:
   a) Understand the milestones in the history of health care and the health care delivery system
   b) Describe important medical advancements and their impact on health care
   c) List the health science career pathways of today (i.e. diagnostic services, health informatics, support services, therapeutic services, and biotechnology research and development)
   d) Compare and contrast the client care responsibilities of each of the health science pathways

2. HUMAN DEVELOPMENT

STUDENTS WILL:
   a) Identify the stages of human growth and development across the lifespan
   b) Identify the characteristics of physical, emotional, social, and intellectual development across the lifespan
   c) Identify typical health care needs for clients in stages across the lifespan
   d) Explain how health care needs at each stage can cause clients stress and describe ways health care professionals can help clients manage stressors
3. BODY SYSTEMS AND CLIENT STATUS

STUDENTS WILL:

a) List body systems and the components and functions of each
b) Define “homeostasis” and describe the interdependence of body systems
c) Practice using health science medical terminology to reference areas of the body
d) List vital signs and body measurements and describe their importance in assessing client health
e) Identify appropriate instruments to measure clients’ height, weight, temperature, pulse rate and rhythm, respiration, and blood pressure
f) Model ways to explain a procedure to a client that will help the client feel comfortable
g) Practice oral and written communication of vital signs and body measurements to clients and members of the client care team
h) Describe how client status information is used by health science professionals in each of the health science career pathways

4. HEALTH SCIENCE PROFESSIONALS

STUDENTS WILL:

a) Define the term “scope of practice” and identify ramifications if health science professionals work outside their scope of practice
b) Distinguish appropriate roles and responsibilities of various health science professionals on a client care team
c) Describe the application of the Patients’ Bill of Rights, patient privacy policies, and informed consent to the work of health science professionals

5. CLIENT CARE CAREERS

STUDENTS WILL:

a) Understand typical client care responsibilities of specific health science careers
b) Assess personal comfort in performing client care responsibilities of specific health science careers
c) Evaluate personal suitability for work in specific health science careers

ILLUSTRATIVE ACTIVITIES BY THEME MODULE

These activities are intended to serve as examples of how the content in this module could be tied to each of the six middle level themes.
CAREER AND COMMUNITY OPPORTUNITIES

INFORMED CONSENT

Invite a health science professional from the school health office to class. Ask the guest to talk about the importance of client confidentiality, client privacy, and informed consent and how they apply to client care in the school community. Students write a main idea statement summarizing the information presented.

COMMUNICATION AND INTERPERSONAL RELATIONSHIPS

STAGES IN THE LIFESPAN

Students develop a single set of interview questions to ask people in various lifespan stages. Questions could include "What makes you happy," "What do you like to eat," "Where would you like to visit?" Each student chooses one person to interview and records the responses. Students share interview answers and classmates try to determine the lifespan stage of the respondent. Conduct a class discussion on the similarities and differences among clients in various lifespan stages.

FINANCIAL AND CONSUMER LITERACY

INSTRUMENT COSTS

Students list the instruments needed to take clients' vital signs and body measurements. Students research the purchase price and maintenance costs for each instrument and calculate a total. As a class, discuss the importance of proper use, care, and storage of instruments used in health science careers.

HEALTH, SAFETY, AND WELLNESS

TAKING VITAL SIGNS

Following teacher demonstrations, students work in groups of three to practice taking and recording vital signs and body measurements. One student is the client, one is the health sciences professional, and one is the observer. Students exchange roles until all three have practiced and received feedback. Students also practice professional communication skills and monitor their clients for signs of stress. Vital signs practice can become a regular skill-building activity throughout the course.
PROBLEM SOLVING AND INNOVATION

HEALTH SCIENCE CAREER TIMELINES
Students work in five groups. Each group will research the history of one of the health science career pathways. Groups create visual timelines depicting the milestones in practice and technology for their pathway. Groups present their timelines to the class. Classmates predict what the next advance might be in each health science career pathway.

SUSTAINABILITY

CLIENT CARE OUTREACH
Students research organizations that provide client care in struggling areas of the community, the state, the nation, or the world. Students produce "Help Wanted" job postings highlighting the work of the organizations, the environments in which they serve, the need for health sciences professionals, and detailing the client care responsibilities. Students write reflections describing their personal interest in providing client care through community organizations.

STANDARDS ADDRESSED

NEW YORK STATE CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES (CDOS) STANDARDS

STANDARD 1: CAREER DEVELOPMENT
Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions

STANDARD 2: INTEGRATED LEARNING
Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings

STANDARD 3A: UNIVERSAL FOUNDATION SKILLS
Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace

COMMON CAREER TECHNICAL CORE STANDARDS

CAREER READY PRACTICES
1. Act as a responsible and contributing citizen and employee
2. Apply appropriate academic and technical skills
3. Attend to personal health and financial well-being  
4. Communicate clearly and effectively and with reason  
5. Consider environmental, social, and economic impacts of decisions  
8. Utilize critical thinking to make sense of problems and persevere in solving them  
9. Model integrity, ethical leadership, and effective management  
10. Plan education and career paths aligned to personal goals  
11. Use technology to enhance productivity  
12. Work productively in teams while using cultural global competence

NATIONAL HEALTH SCIENCE STANDARDS  
Foundation Standard 1: Academic Foundation  
Understand human anatomy, physiology, common diseases and disorders, and medical math principles

Foundation Standard 2: Communications  
Demonstrate methods of delivering and obtaining information, while communicating effectively

Foundation Standard 3: Systems  
Identify how key systems affect services performed and quality of care.

Foundation Standard 4 Employability Skills  
Utilize employability skills to enhance employment opportunities and job satisfaction

Foundation Standard 5: Legal Responsibilities  
Describe legal responsibilities, limitations, and implications on healthcare worker actions

Foundation Standard 8: Teamwork  
Identify roles and responsibilities of individual members as part of the healthcare team

Foundation Standard 9: Health Maintenance Practices  
Differentiate between wellness and disease. Promote disease prevention and model healthy behaviors

RESOURCES

Disclaimer: Posting of resources on this form does not constitute an endorsement from the New York State Education Department nor does it imply that the following resources are mandatory or the only ones that can be used. Teachers and administrators ensure that
resources align with local policies and are responsible for choosing the resources that best meet the needs of their students. Questions regarding compliance with Education Law 2D should be directed to your administrator and/or chief information officer.

**HOSA: FUTURE HEALTH PROFESSIONALS HOSA IN THE CLASSROOM**


HOSA in the classroom provides instructional tools for health science teachers. This section of HOSA website provides an opportunity for HOSA advisors to share exciting and valuable lesson plans with teachers from across the United States.

**CENTERS FOR DISEASE CONTROL (CDC)**

[https://www.cdc.gov/careerpaths/](https://www.cdc.gov/careerpaths/)

CDC’s Career Paths to Public Health (CPP) website is a roadmap for students and teachers interested in learning and teaching about epidemiology and public health sciences (EPHS). It provides information on CDC workshops, activities, and lesson plans, as well as other resources. These materials are designed to introduce the future public health workforce to EPHS, to promote health literacy, and to provide examples of how math and science are used every day to solve public health problems.

**NEW YORK STATE DEPARTMENT OF LABOR: NEW YORK STATE CAREER ZONE**

[https://www.careerzone.ny.gov](https://www.careerzone.ny.gov)

Career Zone is a no-cost online career exploration and planning tool developed by the New York State Department of Labor. It offers career and education information on thousands of careers, as well as, self-assessment and career planning tools. Career Zone is appropriate for users from middle school through adult.

**UNITED STATES DEPARTMENT OF LABOR CAREER ONESTOP**

[https://www.careeronestop.org](https://www.careeronestop.org)

CareerOneStop is the career, training, and job search website for the U.S. Department of Labor. The website serves job seekers, businesses, students, and career advisors with a variety of free online tools, information, and resources.
Research has identified middle school as a time when students can benefit the most from career exploration, a process of building self-awareness, learning about potential careers, and developing a plan for reaching future goals.

Advance CTE provides a Career Interest Inventory worksheet to use with students in helping them identify the potential matches to the sixteen career clusters available to them.

NYSHSEA serves as a resource group for educators seeking consultation concerning Health Science education and promotes communication among NYSHSEA members. NYSHSEA collaborates with other groups and individuals on matters affecting Health Science Education and supports NYSED activities.

The Career and Technical Education Technical Assistance Center (CTE TAC) operates under a state contract to assist the New York State Education Department (NYSED) in carrying out its mission of improving the quality, access, and delivery of career and technical education through research-based methods and strategies resulting in broader CTE opportunities for all students.