

MODULE DESCRIPTION

This module introduces students to health-, safety-, and wellness-enhancing behaviors. Students will examine ways that personal choices and experiences affect their current wellness and long-term outcomes for themselves, their families, their workplaces, and the community. Risk factors that impact health, safety, and wellness and their relationships to current societal issues will be examined. Students will have the opportunity to explore the wide variety of career options in the health, safety, and wellness fields and identify the knowledge, skills, education, and training necessary for success in these fields.

GUIDING QUESTION

What knowledge and skills are needed for individuals to consistently promote and practice safe and healthy behaviors that encourage wellness in home, school, workplace, and community setting?

MODULE CONTENT

Health, Safety, and Wellness

1. Health Practices

Students will

- a) Define physical health, social health, and mental/emotional health and describe how they interact as dimensions of overall wellness
- b) Describe how personal health behaviors and practices impact an individual's body systems
- c) Identify personal health practices that promote overall good health
- d) Explain how overall good health reduces an individual's risks for developing health issues
- e) Identify sources of health information and ways to determine the reliability of the information found
- f) Describe how an individual's health status impacts performance of tasks at home, at school, and in workplace and community settings
- g) List and explain strategies employers have instituted to promote health practices by employees in the workplace

2. Disease Prevention

Students will

- a) Understand and be able to describe how behavioral choices can reduce the risk of contracting and spreading illness at home, at school, in the workplace, and in the community
- b) Demonstrate the use of prevention measures such as hand washing, sanitation and waste disposal, proper food handling and storage, and environmental controls to reduce disease risk
- c) Discuss how stress and poor emotional health can adversely affect the immune system
- d) List and explain strategies employers have instituted to reduce employee risk for

- contracting or spreading illness in the workplace
- e) Describe ways employee absence due to illness impacts the employee, coworkers, and the employer

3. Personal Safety

Students will

- a) Explain how consistently practicing safe behaviors reduces the potential for, incidence of, and severity of injuries
- b) Tell why a particular behavior may be unsafe and how it could be amended to prevent injury
- c) Summarize common causes of intentional and unintentional injury and describe associated prevention strategies
- d) Explain how an orderly environment promotes reduction of accidents and injury
- e) Develop safety plans and practice emergency responses

4. Classroom and Workplace Safety

Students will

- a) List and describe the purpose of safety rules specific to classroom and workplace settings
- b) Recognize potential hazards and explain accident prevention strategies specific to classroom and workplace settings
- c) Apply safety practices when using tools, machines, and equipment
- d) Wear appropriate protective clothing and gear when using tools, machines, and equipment
- e) Participate in housekeeping procedures that help to establish and maintain safe working conditions in the classroom or workplace
- f) Explain the purpose of Safety Data Sheets (SDS) for poisonous, toxic, or hazardous substances and know where to find them in the classroom or workplace
- g) Understand and follow preplanned procedures in the case of accident or emergency
- h) List the components of an accident report and explain the importance of preparing a thorough report should an accident occur in the classroom or workplace
- i) Demonstrate development of workplace safety skills through practice of these skills in a variety of classroom applications

5. Social-Emotional Learning

Students will

- a) Discuss how personal habits, environment, and heredity affect social-emotional health
- b) Understand and explain ways social-emotional skills can lead to positive relationships in home, school, workplace, and community settings
- c) Label, understand, and apply strategies for managing emotions; feeling and showing empathy for others; making responsible decisions; and handling challenging situations
- d) Define "mental health"
- e) Identify school personnel with whom to discuss social, emotional, or mental health issues
- f) Identify school, workplace, and community resources providing services for individuals and families facing social, emotional, or mental health issues

6. Stress Management

Students will

- a) Define "stress" and identify situations that contribute to stress
- b) Discuss how stress and poor emotional health can affect the immune system

- c) Recognize signs of stress and take steps to reduce its impact on overall wellness
- d) Research and practice techniques to manage stressful situations
- e) Assess the effectiveness of stress management techniques and determine steps to take to address stress if reduction is not achieved

7. Careers in Health, Safety, and Wellness Fields

Students will

- a) Investigate knowledge, skills, and practices needed for a career in the healthcare, human services, and safety fields
- b) Analyze career paths within the healthcare, human services, and safety fields
- c) Evaluate personal skills, abilities, and interests for employment in the healthcare, human services, and safety fields

ILLUSTRATIVE ACTIVITIES by CTE Content Area

Agricultural Education

Bacterial Growth Experiment

Students study food preservation and safety by experimenting with bacterial growth on a piece of white bread. Discuss the factors needed for bacterial growth and processes to minimize growth. Students place a slice of white bread without preservatives in a plastic bag and seal it. Place another slice in a condition using a food preservation technique such as drying, freezing, or salting. Compare bacterial growth on the samples at regular intervals for a 2-week period. Discuss the role of proper food handling in the prevention of disease.

Business and Marketing Education

Stress Management Role Plays

Divide the class into small groups. Give each group a workplace situation. Ask the groups to discuss how the situation might be stressful. Invite the groups to roleplay both a positive and a negative reaction to one of the stressful workplace situations.

Workplace situations might include:

- A new boss is starting at the company next week
- You have been late for work and your boss is not happy
- The job you do is very repetitive and you feel bored
- You work really hard but don't think anyone notices your effort
- You have a poor relationship with your colleagues
- You have just been promoted

Family and Consumer Sciences Education

Nutrition and Health Claims

Students observe and note nutrition and health claims made on a variety of food packages for different types of food items. Students will arrange the foods from most healthy to least healthy based on the claims made on the packages. Students will research the meanings for nutrient or health claims as defined by the Nutrition Labeling and Education Act (NLEA). Then, students will decide whether they would like to rearrange the order of the foods based on their understanding of the definitions. Discuss the usefulness of nutrient and health claims found on food packaging.

Health Science Education

Disease Prevention in the Workplace

Students are asked to think about their school as their workplace and to consider ways their employer has instituted strategies to reduce their risk for contracting or spreading illness in their workplace. Students take a "Disease Prevention Walk" around their school and note ways disease prevention has been addressed. Examples might be hand sanitizer stations outside the cafeteria; hand-washing signs in restrooms; hands-free paper dispensers, etc. Discuss observations and then discuss and list strategies the school has not yet tried. Communicate the list to school leaders for future consideration.

Technology Education

Classroom and Workplace Safety Posters

Students develop safety posters that communicate how to use a tool or piece of equipment safely. Each poster should include a diagram or picture of the tool or piece of equipment, labeled to show both safety features and dangerous components. Students will present their posters at a time to coincide with when the tool or piece of equipment will be used in class. Classmates will be able to recognize potential hazards and explain accident prevention strategies specific to the tool or piece of equipment.

Trade and Technical Education

Safety Data Sheets

Students work in pairs to learn common chemical hazard vocabulary, using a teacher-highlighted Safety Data Sheet (SDS) for a common substance. Then, pairs of students will extract information from nonhighlighted SDS for five common household chemicals often found in the classroom. Student pairs will determine which of the studied chemicals they think is most dangerous and prepare an easy-to-understand safety sheet for classroom use.

STANDARDS ADDRESSED

New York State Career Development and Occupational Studies (CDOS) Standards Intermediate Level
<http://www.nysed.gov/career-technical-education/new-york-state-learning-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

<https://www.careertech.org/career-ready-practices>

Career Ready Practices

1. Act as a responsible and contributing citizen and employee
3. Attend to personal health and financial well-being
5. Consider environmental, social, and economic impacts of decisions
8. Utilize critical thinking to make sense of problems and persevere in solving them

National Agricultural Education Standards

<https://www.ffa.org/>

- CS.03 Examine and summarize the importance of health, safety, and environmental management systems in AFNR workplaces
- AS.02.02 Analyze procedures to ensure that animal products are safe for consumption (e.g., use in the food system)
- BS.02 NCAE Standard: Demonstrate proficiency by applying appropriate laboratory skills to complete tasks in a biotechnology research and development environment (e.g., standard operating procedures, record keeping, aseptic technique, equipment maintenance)
- FPP.01. Develop and implement procedures to ensure safety, sanitation, and quality in food product and processing facilities
- PST.02.02 Operate machinery and equipment while observing all safety precautions in AFNR settings
- CRP.03. Attend to personal health and financial well-being

Note: National Agricultural Education Standards CRP .01-.12 coincide with Common Core Technical Core Standards

National Business Education Standards

<https://www.nbea.org/>

Business Law

III. Agency and Employment Achievement Standard

Analyze the role and importance of agency law and employment law as they relate to the conduct of business

Career Development

I. Self-Awareness Achievement Standard

Assess personal skills, abilities, and aptitudes and personal strengths and weaknesses as they relate to career exploration and development

Management

IV. Personal Management Skills Achievement Standard

Develop personal management skills to function effectively and efficiently in a business environment

National Family and Consumer Sciences Standards

<http://www.leadfcsed.org/national-standards.html>

1.0 Career, Community, and Family Connections

Integrate multiple life roles and responsibilities in family, work, and community settings

1.2 Demonstrate transferable knowledge, attitudes, technical and employability skills in school, community, and workplace settings

1.2.7 Analyze factors that contribute to maintaining safe and healthy school, work, and community environments

9.0 Food Science, Dietetics, and Nutrition

Integrate knowledge, skills, practices required for careers in food science, food technology, dietetics, and nutrition

9.2 Apply risk management procedures to food safety, food testing, and sanitation

14.0 Nutrition and Wellness

Demonstrate nutrition and wellness practices that enhance individual and family well-being

14.1 Analyze factors that influence nutrition and wellness practices across the life span.

14.1.1 Explain physical, emotional, social, psychological, cultural, and spiritual components of individual and family wellness.

National Consortium for Health Science Education

<https://www.healthscienceconsortium.org/national-health-science-standards/>

Foundation Standard 7: Safety Practices

Identify existing and potential hazards to clients, co-workers, and self. Employ safe work practices and follow health and safety policies and procedures to prevent injury and illness.

7.1 Infection Control

7.11 Explain principles of infection control

7.12 Differentiate methods of controlling the spread and growth of microorganisms.

7.2 Personal Safety

7.21 Apply personal safety procedures based on Occupational Safety and Health Administration (OSHA) and Centers for Disease Control (CDC) regulations

7.22 Demonstrate principles of body mechanics.

7.3 Environmental Safety

7.31 Apply safety techniques in the work

7.4 Common Safety Hazards

7.41 Observe all safety standards related to the Occupational Exposure to Hazardous Chemicals Standard

7.42 Comply with safety signs, symbols, and labels

7.5 Emergency Procedures and Protocols

7.52 Apply principles of basic emergency response in natural disasters and other emergencies

Foundation Standard 9: Health Maintenance Practices

Differentiate between wellness and disease. Promote disease prevention and model healthy behaviors.

9.1 Healthy Behaviors

9.11 Promote behaviors of health and wellness (such as: nutrition, weight control, exercise, sleep habits).

9.12 Describe strategies for prevention of disease.

9.13 Investigate complementary and alternative health practices as they relate to wellness and disease prevention

International Technology and Engineering Educators Association

Standards for Technological Literacy

<https://www.iteea.org/>

The Nature of Technology

2. Students will develop an understanding of the core concepts of technology

U. Maintenance is the process of inspecting and servicing a product or system on a regular basis in order for it to continue functioning properly, to extend its life, or to upgrade its capacity

Technology and Society

4. Students will develop an understanding of the cultural, social, economic, and political effects of technology

D. The use of technology affects humans in many ways, including their safety, comfort, choices, and attitudes about technology's development and use

Abilities for a Technological World

12. Students will develop the abilities to use and maintain technological products and systems

I. Use tools, materials, and machines to safely diagnose, adjust, and repair systems

The Designed World

June 2018

NYS Middle-level CTE

Preliminary Release for Field Review and Piloting

14. Students will develop an understanding of and be able to select and use medical technologies
 - G. Advances and innovations in medical technologies are used to improve healthcare
 - H. Sanitation processes used in the disposal of medical products help to protect people from harmful organisms and disease, and shape ethics of modern society
 - I. The vaccines developed for use in immunization require specialized technologies to support environments in which sufficient amounts of vaccines are produced
15. Students will develop an understanding of and be able to select and use agricultural and related biotechnologies
 - J. The development of refrigeration, freezing, dehydration, preservation, and irradiation provide long-term storage of food and reduce health risks caused by tainted food

USDOE Employability Skills

<http://cte.ed.gov/>

Applied Knowledge: Applied Academic Skills, Critical Thinking Skills

The thoughtful integration of academic knowledge and technical skills put to practical use

Effective Relationships: Interpersonal Skills, Personal Qualities

The skills that enable individuals to interact effectively with clients, coworkers, and supervisors

Workplace Skills: Resource Management, Information Use, Communication Skills, Systems Thinking, Technology Use

The skills employees need to successfully perform work tasks

RESOURCES

New York State Education Department

Office of Student Support Services

Educating the Whole Child, Engaging the Whole School: Guidelines and Resources for Social and Emotional Development and Learning (SEDL) in New York State

<http://www.p12.nysed.gov/sss/>

Social and Emotional Development and Learning (SEDL) Guidelines offer school districts compelling information, example, and evidence of SEDL in elementary and secondary school education programs. This guidance document aims to give New York state school communities a rationale and the confidence to address child and adolescent affective development.

New York Center for Agricultural Medicine and Health (NYCAMH)

<http://www.nycamh.org>

NYCAMH is a New York state and NIOSH designated center for occupational disease and injury prevention research as well as the provider of occupationally related physical and mental health services to farmers and families in the rural Northeast. The National Agricultural Safety Database (NASD) has a collection of publications about agricultural safety and health.

New York Committee for Occupational Safety and Health (NYCOSH)

<http://www.nycosh.org>

Young Workers Program develops Peer Leaders to train young people about their workplace rights, safety and health. Programs also train teachers, parents and employers on how to protect the safety and health of young workers.

United States Department of Labor

Occupational Safety and Health Administration (OSHA)

<https://www.osha.gov/dte/>

OSHA provides free training materials such as publications, videos, and other assistance to help employers protect workers against accidents and injuries.

Centers for Disease Control and Prevention (CDC)

<https://www.cdc.gov>

The CDC Learning Connection is a resource for information about public health training developed by CDC, CDC partners, and other federal agencies. Through website features, social media, and an e-newsletter, the CDC Learning Connection provides information about training opportunities, including many that offer free continuing education.

Career and Technical Education Technical Assistance Center of New York (CTE TAC)

<http://nyctecenter.org/>

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.