

Health Science 1 (2013): Grades 10, 11, 12

Adopted 2013

FOUNDATION STANDARD 1: ACADEMIC FOUNDATION

1. Describe healthcare history and medical advances
2. Identify components and solve computations of the metric and household systems of measure
3. Calculate mathematical conversions of temperature and weights and measures related to healthcare such as height, weight/mass, length, volume, temperature and household measurements
4. Demonstrate recording time using 24-hour clock/military time
5. Recognize and convert traditional numbers to roman numerals
6. Define and recognize entry level Medical Terminology and terms related to healthcare
7. Identify body planes, directional terms, cavities, and quadrants

FOUNDATION STANDARD 2: COMMUNICATIONS

1. Interpret and model verbal and nonverbal communication
2. Recognize and identify common barriers to communication
3. Recognize elements of communication using a sender-receiver model.
 - 3a. Physical disabilities (aphasia, hearing loss, impaired vision)
 - 3b. Psychological barriers (attitudes, bias, prejudice, stereotyping)
4. Apply and practice speaking and active listening skills
5. Recognize elements of written and electronic communication (spelling, grammar, formatting, and confidentiality)

FOUNDATION STANDARD 3: SYSTEMS

1. Identify and compare healthcare delivery systems (public, private, government)
 - 1a. Profit and Non-Profit: hospitals, ambulatory facilities, long term care facilities, home health, medical and dental offices, mental health services) and explain factors that influence them (including emerging issues)

- 1b. Regulatory Bodies: CDC, FDA, WHO, OSHA, Public Health Systems/Health Departments, Veteran's Administration
- 1c. Non-Profits: March of Dimes, American Heart Association

2. Identify the importance of an organizational structure in health care

**FOUNDATION STANDARD
4: EMPLOYABILITY
SKILLS**

- 1. Identify and apply personal traits or attitudes desirable as a career ready member of the healthcare team: a. acceptance of criticism, b. competence, c. dependability, d. discretion, e. empathy, enthusiasm, g. honesty, h. initiative, i. patience, j. responsibility, k. self motivation, l. tact, m. team player, n. willingness to learn
- 2. Identify and apply employability skills desirable as a career ready member of the healthcare team: a. chain of command, b. correct grammar, c. decision making, d. flexibility, e. initiative, f. loyalty, g. positive attitude
- 3. Summarize and demonstrate professional standards and characteristics as they apply to hygiene, dress, language, confidentiality, and behavior
- 4. Compare careers within the health science career pathways (diagnostic services, therapeutic services, health informatics, support services, or biotechnology research and development)
- 5. Research and evaluate levels of education, credentialing requirements, employment trends in health professions (opportunities, workplace environments, and career earnings, etc.)
- 6. Initiate development of components of a personal portfolio (healthcare project, writing sample, work based learning, oral presentation, service learning, credentials, technology and leadership experience)
- 7. Demonstrate professional and leadership skills by actively participating in learning experiences through HOSA Future Health Professionals, student organization (either as a member or as a participant in sponsored activities)

**FOUNDATION STANDARD
6: ETHICS**

- 1. Identify and discuss religious and cultural values as they impact healthcare (such as ethnicity, race, religion, gender) and demonstrate respectful and empathetic interactions and treatment of all patients/clients within a diverse population (such as customer service, patient satisfaction, civility)

**FOUNDATION STANDARD
7: SAFETY PRACTICES**

- 1. Identify major classes of microorganisms and describe the chain of infection
- 2. Demonstrate infection control principles (such as handwashing, gloving, environmental cleaning)
- 3. Apply techniques pertaining to personal and environmental safety (body mechanics, ergonomics, safe operation of equipment, patient safety)

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- 4. Apply common safety procedures based on Occupational Safety and Health Administration (OSHA) and Centers for Disease Control (CDC) regulations**
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- 5. Comply with safety signs, labels, and symbols including all safety standards related to the Occupational Exposure to Hazardous Chemicals Standard (Safety Data Sheets)**
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- 6. Practice fire safety related to a healthcare setting.**
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- 7. Summarize principles of basic emergency response in natural disasters or other emergencies (safe location, bioterrorism, active shooter, contact emergency personnel, following protocol)**
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**FOUNDATION STANDARD
8: TEAMWORK**

- 1. Explain and evaluate roles and responsibilities of team members.**
 - 1a.** Examples of healthcare teams
 - 1b.** Responsibilities of team members
 - 1c.** Benefits of teamwork
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- 2. Respect interdisciplinary roles of team members and act responsibly as a team member.**
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- 3. Recognize characteristics of effective teams and methods for building positive team relationships: a. active participation, b. commitment, c. common goals, d. cultural sensitivity, e. flexibility, f. open to feedback, g. positive attitude, h. reliability, i. trust, j. value individual contributions**
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- 4. Collaborate with others to formulate team objectives.**
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- 5. Explore and analyze attributes and attitudes of an effective leader: .**
 - 5a** Characteristics (interpersonal skills, focused on results, positive)
 - 5b.** Types (autocratic, democratic, laissez faire)
 - 5c.** Roles (sets vision, leads change, manages accountability)
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- 6. Apply techniques for managing team conflict (negotiation, assertive communication, gather the facts, clear expectations, mediation). Recognize methods for building positive team relationships (mentorships, teambuilding)**
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**FOUNDATION STANDARD
9: HEALTH
MAINTENANCE
PRACTICES**

- 1. Apply behaviors that promote health and wellness (nutrition, weight control, exercise, sleep habits)**
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- 2. Describe strategies for the prevention of disease: routine physical exams; medical, dental and mental health screenings; community health education outreach programs, immunizations, stress management, avoid risky behaviors**
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- 3. Investigate complementary and alternative health practices as they relate to wellness and disease such as Eastern medicine, holistic medicine, homeopathy,**
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manipulative and natural therapies

FOUNDATION 10: TECHNICAL SKILLS

1. Explore procedures for measuring and recording vital signs and height/weight including normal ranges
 2. Demonstrate use of Snellen chart.
 3. Introduction to first aid procedures. (Certification optional in level 1)
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FOUNDATION STANDARD 11: INFORMATION TECHNOLOGY APPLICATIONS

1. Communicate using technology (fax, e-mail, and Internet) to access and distribute data and other information. (including assignments and online assessments)
 - 1a. Demonstrate appropriate usage of email and social media in a work environment (work related communications, personal texting on own time, appropriate language and content, use full language sentences)
2. Demonstrate basic computer skills
 - 2a. Apply basic computer concepts and terminology necessary to use computers and other mobile devices
 - 2b. Demonstrate basic computer troubleshooting procedures (restart, check power supply, refresh browser, and check settings)
 - 2c. Demonstrate use of file organization and information storage
 - 2d. Identify uses of basic word processing, spreadsheet and database applications
3. Recognize technology applications and key technology principles used in healthcare
 - 3a. Identify types of data collected in Electronic Health Records/Electronic Medical Records (EHR/EMR, such as history and physical, medications, diagnostic tests, patient demographics)
 - 3b. Evaluate the validity of web based resources