

Health Careers Standards

Bemidji Area Schools - June 2017

NATIONAL HEALTH SCIENCE STANDARDS

May 2015

The National Health Science Standards provide a clear and consistent understanding of industry and post-secondary expectations for health science teachers and students. These standards are designed to provide the essential knowledge common across health professions to prepare and increase the number of students that are college and career ready.

Description: This course is a study of the language used in the health care delivery system. The course presents component medical word parts and their use in building and interpreting medical terminology related to each body system. Spelling, pronunciation and usage of medical terminology is emphasized.

Recommended for grades: 10-12

Hours Required: One Semester

Recommended Prerequisites: None

Foundation Standard 1: Academic Foundation			Activities
Understand human anatomy, physiology, common diseases and disorders, and medical math principles.			Students will:
1.1 Human Anatomy and Physiology	1.11	Identify basic levels of organization of the human body.	<ul style="list-style-type: none"> - Practice activity packets labeling the body systems diagrams
	1.12	Identify body planes, directional terms, cavities, and quadrants.	
	1.13	Analyze basic structures and functions of human body systems (skeletal, muscular, integumentary, cardiovascular, lymphatic, respiratory, nervous, special senses, endocrine, digestive, urinary, and reproductive).	
1.2 Diseases and Disorders	1.21	Describe common diseases and disorders of each body system (such as: cancer, diabetes, dementia, stroke, heart disease, tuberculosis, hepatitis, COPD, kidney disease, arthritis, ulcers).	<ul style="list-style-type: none"> - Discuss common diseases and disorders of each system - Create a PowerPoint about a medical condition <ul style="list-style-type: none"> ▪ Define
	1.22	Discuss research related to emerging diseases and disorders (such as: autism, VRSA, PTSD, Listeria, seasonal flu).	

Health Careers Standards

Bemidji Area Schools - June 2017

	1.23	Describe biomedical therapies as they relate to the prevention, pathology, and treatment of disease.	<ul style="list-style-type: none"> ▪ Symptoms ▪ Diagnosis ▪ Treatment ▪ Prevention
1.3 Medical Mathematics	1.31	Demonstrate competency in basic math skills and mathematical conversions as they relate to healthcare.	<ul style="list-style-type: none"> - Medical Math Stations <ul style="list-style-type: none"> a. Dosage calculations worksheet b. Graphing heights and weights c. Convert standard time to military time d. Measure flexion of joints with goniometer

Foundation Standard 2: Communications		Activities	
Demonstrate methods of delivering and obtaining information, while communicating effectively.		Students will:	
2.1 Concepts of Effective Communication	2.11	Model verbal and nonverbal communication	- Refer to vocabulary list for the module
	2.12	Identify common barriers to communication. <ul style="list-style-type: none"> a. Physical disabilities (aphasia, hearing loss, impaired vision) b. Psychological barriers (attitudes, bias, prejudice, stereotyping) 	- Write down 3 specific examples of verbal and non-verbal communication and be prepared to discuss them in class.
	2.13	Identify the differences between subjective and objective information.	- Discuss Principles for Good Listening
	2.14	Interpret elements of communication using basic sender-receiver-message-feedback model.	<ul style="list-style-type: none"> - Demonstrate telephone message taking skills. - Message taking skills - Message should include: <ul style="list-style-type: none"> a. date b. time c. who the message is for d. the caller's name e. caller's phone number f. reason for the call

Health Careers Standards

Bemidji Area Schools - June 2017

	2.15	Practice speaking and active listening skills.	<ul style="list-style-type: none"> - Practice active listening skills and write down 3 specific examples of skills that you utilized, be prepared to discuss them online/in class. - Write down a message based on information given by the instructor
	2.16	Modify communication to meet the needs of the patient/client and be appropriate to the situation.	

Foundation Standard 3: Systems Identify how key systems affect services performed and quality of care.			Activities Students will:
3.1 Healthcare Delivery Systems	3.11	Compare healthcare delivery systems.	<ul style="list-style-type: none"> - Discuss the appropriate use of health care facilities
	3.12	Describe the responsibilities of consumers within the healthcare system (such as: self-advocacy, patient compliance, and provider and consumer obligations).	<ul style="list-style-type: none"> - Using different scenarios, students will decide and justify the type of services to utilize for level of care needed
	3.13	Assess the impact of emerging issues on healthcare delivery systems (such as: technology, epidemiology, bioethics, and socioeconomics).	
	3.14	Discuss healthcare economics and common methods of payment for healthcare.	

Foundation Standard 4: Employability Skills Utilize employability skills to enhance employment opportunities and job satisfaction.			Activities Students will:
4.1 Personal Traits of the Health Professional	4.11	Identify personal traits and attitudes desirable in a member of the career ready healthcare team.	<ul style="list-style-type: none"> - Create an acronym with their name using adjectives to describe qualities needed to be a healthcare worker - Review and discuss the Pillars of Character

Health Careers Standards

Bemidji Area Schools - June 2017

	4.12	Summarize professional standards as they apply to hygiene, dress, language, confidentiality and behavior.	<ul style="list-style-type: none"> - Class discussion <ul style="list-style-type: none"> a. Cleanliness, body and clothing b. Short clean fingernails/no artificial nails c. Socks and closed shoes d. Limited jewelry/body piercing and tattoos e. Odors (cologne, perfume or smoke smell) f. Appropriate clothing for work - Rational <ul style="list-style-type: none"> a. Infection control b. Allergies and sensitivities c. Dress to instill confidence
4.2 Employability Skills	4.21	Apply Employability skills in healthcare.	<ul style="list-style-type: none"> - Discuss methods for building positive team relationships - Recognize characteristics of effective teams - Describe attributes and attitudes of an effective leader - Describe the roles workers have in healthcare teams across a variety of healthcare settings - Discuss the impact healthcare teamwork and partnerships have in meeting client healthcare needs
4.3 Career Decision-Making	4.31	Research levels of education, credentialing requirements, and employment trends in health professions.	<ul style="list-style-type: none"> - Research a career and 2 schools that offer the program; one in state, and one out of state - Design a brochure on the schools to include course work, cost, living arrangements and type of degree received
4.4 Employability Preparation	4.41	Develop components of a personal portfolio. <ul style="list-style-type: none"> a. Letter of introduction b. Resume 	<ul style="list-style-type: none"> - Students will create a resume and write a cover letter

Health Careers Standards

Bemidji Area Schools - June 2017

Foundation Standard 5: Legal Responsibilities Describe legal responsibilities, limitations, and implications on healthcare worker actions.			Activities Students will:
5.1 Legal Responsibilities and Implications	5.11	Analyze legal responsibilities and implications of criminal and civil law. <ul style="list-style-type: none"> a. Malpractice b. Negligence c. Assault d. Battery e. Invasion of privacy f. Abuse 	<ul style="list-style-type: none"> - Review Vocabulary List for Legal Issues in Healthcare (at end of this section) - Search the Web for Federal Healthcare Laws - Discuss online/in class the laws and their impact on healthcare for workers and recipients of care
5.2 Legal Practices	5.21	Apply standards for the safety, privacy and confidentiality of health information (HIPAA, privileged communication).	Discuss the reason/purpose for the completion of background studies
	5.22	Describe advance directives.	<ul style="list-style-type: none"> - Discuss the differences in a Living Will and Durable Power of Attorney
	5.23	Summarize the essential characteristics of a patient's basic rights within a healthcare setting.	<ul style="list-style-type: none"> - Refer to CAPT (Child Abuse Prevention and Treatment Act) website - Read the Act - Read the Vulnerable Adult Act - Small group discussions online/in class regarding the importance of the Bill of Rights to patient care
	5.24	Define informal consent	<ul style="list-style-type: none"> - Review HIPAA and complete worksheet

Health Careers Standards

Bemidji Area Schools - June 2017

Foundation Standard 6: Ethics Understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment.			Activities Students will:
6.1 Ethical Practice	6.11	Differentiate between ethical and legal issues impacting healthcare.	<ul style="list-style-type: none"> - Play the Ethical Game "Who Gets the Organ"
	6.12	Identify ethical issues and their implications related to healthcare (such as: organ, donation, <i>in vitro</i> fertilization, euthanasia, scope of practice, ethics committee).	
	6.13	Utilize procedures for reporting activities and behaviors that affect the health, safety, and welfare of others (such as: incident report).	
6.2 Cultural, Social, and Ethnic Diversity	6.21	Discuss religious and cultural values as they impact healthcare (such as: ethnicity, race, religion, gender).	<ul style="list-style-type: none"> - Compose an essay on a controversial topic and their stance on it - Presentation of African Tribal wedding - Research a culture other than their own and present a PowerPoint presentation to the class
	6.22	Demonstrate respectful and empathetic treatment of ALL patients/clients (such as: customer service, patient satisfaction, civility).	

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.			Activities Students will:
7.1 Infection Control	7.11	Explain principles of infection control. <ol style="list-style-type: none"> a. Chain of Infection b. Mode of transmission (direct, indirect, vectors, common vehicle [air, food, water], healthcare-associated infections [nosocomial, opportunistic]) c. Microorganisms (non-pathogenic, pathogenic, aerobic, anaerobic) d. Classifications (bacteria, protozoa, fungi, viruses, parasites) 	<ul style="list-style-type: none"> - View AHA DVD on blood borne pathogens

Health Careers Standards

Bemidji Area Schools - June 2017

	7.12	Differentiate methods of controlling the spread and growth of microorganisms. <ul style="list-style-type: none"> a. Aseptic control (antiseptics, disinfection, sterilization, sterile technique) b. Standard precautions c. Isolation precautions d. Blood borne pathogen precautions 	- Demonstrate soiled glove removal and proper handwashing
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.	- "Back to the Suture" back safety video and worksheet
	7.22	Demonstrate principles of body mechanics.	- Review Right to Know Law (Minnesota Statute 182.655)
7.3 Environmental Safety	7.31	Apply safety techniques in the work environment. <ul style="list-style-type: none"> a. Ergonomics 	
7.4 Common Safety Hazards	7.41	Observe all safety standards related to the Occupational Exposure to Hazardous Chemicals Standard (Safety Data Sheets [SDSs]). www.osha.gov	- Research Safety Data Sheets (SDS) websites
	7.42	Comply with safety signs, symbols, and labels.	
7.5 Emergency Procedures and Protocols	7.51	Practice fire safety in a healthcare setting.	- How to use a fire extinguisher: PASS <ul style="list-style-type: none"> ▪ <u>Pull</u>: Pull safety pin (twist & pull) ▪ <u>Aim</u>: Aim nozzle at base of fire ▪ <u>Squeeze</u>: Squeeze trigger handle ▪ <u>Sweep</u>: Sweep side to side at base of fire

Health Careers Standards

Bemidji Area Schools - June 2017

Foundation Standard 8: Teamwork Identify roles and responsibilities of individual members as part of the healthcare team.			Activities Students will:
8.1 Healthcare Teams	8.11	Evaluate roles and responsibilities of team members. <ul style="list-style-type: none"> a. Examples of healthcare teams b. Responsibilities of team members c. Benefits of teamwork 	- Form groups of 4 and compete in a puzzle-making contest
	8.12	Identify characteristics of effective teams.	- Have post-contest discussion on teamwork
8.2 Team Member Participation	8.21	Recognize methods for building positive team relationships (such as: mentorships and teambuilding).	- Write an essay about a time when someone did not pull their weight in a team effort
	8.22	Analyze attributes and attitudes of an effective leader. <ul style="list-style-type: none"> a. Characteristics (interpersonal skills, focused on results, positive) b. Types (autocratic, democratic, laissez faire) c. Roles (sets vision, leads change, manages accountability) 	
	8.23	Apply effective techniques for managing team conflict (negotiation, assertive communication, gather the facts, clear expectations, mediation).	

Foundation Standard 9: Health Maintenance Practices Differentiate between wellness and disease. Promote disease prevention and model healthy behaviors.			Activities Students will:
9.1 Healthy Behaviors	9.11	Promote behaviors of health and wellness (such as: nutrition, weight control, exercise, sleep habits).	- Reflect on personal health and create a plan to maintain or improve health
	9.12	Describe strategies for prevention of disease	- Participate in stress reduction techniques in class <ul style="list-style-type: none"> ▪ Journaling ▪ Walking ▪ Meditation ▪ Massage ▪ Watch comedy clips ▪ Group discussion
	9.13	Investigate complementary and alternative health practices as they relate to wellness and disease prevention (such as: Eastern medicine, holistic medicine, homeopathy, manipulative and natural therapies).	

Health Careers Standards

Bemidji Area Schools - June 2017

Foundation Standard 10: Technical Skills Apply technical skills required for all career specialties and demonstrate skills and knowledge as appropriate.			Activities Students will:
10.1 Technical Skills	10.11	Apply procedures for measuring and recording vital signs including the normal ranges (temperature, pulse, respirations, blood pressure, and pain).	- Receive classroom instruction on vital signs
	10.12	Obtain training or certification in cardiopulmonary resuscitation (CPR), automated external defibrillator (AED), foreign body airway obstruction (FBAO) and first aid.	- Demonstrate accurate measurement of vitals on each other - Have the opportunity to obtain BLS for providers CPR