



Introduction to Health Sciences

Course Description

Introduction to Health Science is designed to give an overview of the therapeutic, diagnostic, support services, biotechnology & research and health informatics pathways. The course focuses on health careers, exploration, leadership development, medical terminology, ethical and legal responsibilities, the history of health care and the economics of health care.

Course Code: 077300

Program(s) of Study to which this course applies:

- All Health Sciences Pathways

Course Content	Crosswalk to Common Core Academic Standards	Crosswalk to Nebraska Academic Standards	Crosswalk to Nebraska Career Readiness Standards	Crosswalk Clarification
<p>Standard 1. Students will explore the history of health care and pathways of health careers.</p>				
<p>Benchmark 1.1 Compare careers within the health science career pathways (diagnostic services, therapeutic services, health informatics, support services or biotechnology research and development.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Review the health careers in the Occupational Outlook Handbook, Nebraska Career connections website, Nebraska Career Information System etc. • Poster series for each of the pathways. • Research a health career, create a career health display and present the information to the class i.e. HOSA Career Health Display Team Event. • Interview and shadow career health professionals and use the information to 	N/A	SS.12.2.6.b–d	CR.1.B.1 CR.5.A.1 CR.10.A.1	



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<p>prepare for the HOSA Medical Photography Leadership Event.</p> <ul style="list-style-type: none"> • Invite local health professionals to speak to classes, provide shadowing opportunities etc. • Discuss level of education, credentialing requirements and employment trends in healthcare. 				
<p>Benchmark 1.2 Analyze personal aptitudes and interests related to health careers.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Complete self assessment surveys on Nebraska Career Connections, Nebraska Career Information Systems etc. • Analyze information from self-assessments. • Interview health professionals about aptitudes and interests. 	N/A	SS.12.2.6.c	CR.5.A.1 CR.10.A.1	
<p>Benchmark 1.3 Classify the personal traits and attitudes desirable in the health care professions.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Discuss professionalism i.e. background checks, body art, personality characteristics, dress, language, confidentiality, ability to handle conflict, communication. 	N/A	N/A	CR.5.A.1	
<p>Benchmark 1.4 Investigate the history of health care.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Create a time line showing the progression of health care. • Visit cemeteries to see who died during the epidemics, mortality rates etc. 	ELA.WHST.11-12.7-9	LA.12.4.1.a-c LA.12.1.6.j SC.12.1.2.a SC.12.1.2.b SC.12.1.2.c SC.12.1.2.d SS.12.4.1.c SS.12.4.4.e	CR.5.B.1 CR.9.A.2	<p>The depth of students’ investigations, and thus the research standards that apply, will be determined by the nature of the task (CC: ELA.WHST.11–12.7–9; NE: CR.5.B.1, CR.9.A.2, LA.12.4.1.a-c, LA.12.1.6.j).</p> <p>Alignment presumes that students will investigate the evolution of scientific explanations (e.g., germs), how those explanations were modified over time, and the</p>



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				effect these explanations had on health care and therefore society as a whole (NE: SC.12.1.2.a, SC.12.1.2.b, SC.12.1.2.c, SC.12.1.2.d).
<p>Standard 2. Students will differentiate between legal and ethical standards of health care.</p>				
<p>Benchmark 2.1 Identify aspects of legal considerations related to health care.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Become aware of HIPAA. • Describe advance directives. • Summarize Patient’s Bill of Rights. • Understand informed consent. • Examine scenarios simulating scope of practice issues. • Review components of documentation and record keeping. 	N/A	N/A	CR.3.B.4 CR.7.B.2	
<p>Benchmark 2.2 Identify ethical practice.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Recognize ethical issues and their implications related to health care. • Compare and contrast religious and cultural beliefs as they impact health care. • Recognize the protocol for reporting issues that affect health, safety and welfare of others. 	N/A	N/A	CR.7.B.1-2	
<p>Standard 3. Students will develop the various methods of giving and obtaining information including oral and written.</p>				



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<p>Benchmark 3.1 Interpret forms of communication</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Demonstrate and interpret nonverbal communication. • Identify and evaluate various verbal communication scenarios. • Demonstrate appropriate written techniques. • Recognize and demonstrate listening skills. • Differentiate between subjective and objective information. • Research, prepare and present information using the HOSA Research Persuasive Speaking, Prepared Speaking, Extemporaneous Speaking or Extemporaneous Writing Leadership Events. • Prepare for and carry out the HOSA Public Service Announcement Event. 	N/A	N/A	CR.2.A-C	This benchmark potentially requires a wide spectrum of English skills, including reading and listening.
<p>Benchmark 3.2 Recognize barriers to communication</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Recognize cultural and special needs i.e. age appropriate, gender, physical/mental limitations, ageism, race, religion. • Identify resources for interpretation situations. 	N/A	N/A	N/A	
<p>Benchmark 3.3 Recognize the different parts of medical terminology.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Identify and comprehend medical abbreviations to communicate information. • Identify and comprehend prefixes, suffixes, root words to communicate information. 	ELA.L.11–12.6	NE.LA.12.1.5.	N/A	
<p>Standard 4. Students will understand the roles and responsibilities of individual members of an effective team.</p>				



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<p>Benchmark 4.1 Become knowledgeable about characteristics of an effective team.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> Recognize and apply methods for building positive team relationships. Analyze attributes and attitudes of an effective leader. Analyze the roles of all team members. Apply effective techniques for managing team conflict. Participate in HOSA Team events i.e. Career Health Display, HOSA Bowl, Biomedical Debate, Creative Problem Solving. Organize and carry out a community service project. i.e. Blood Drive, H1N1 Clinic, Health Awareness Week. Collaborate with other Career Student Organizations on a project related to a health issue. i.e. obesity, bicycle safety, autism, Special Olympics etc. Develop and carry out a HOSA Health Education Project or Community Awareness Campaign. Identify the hierarchy of a health care system and the relationship to teamwork. 	N/A	LA.12.3.3.b	CR.8.A.1-3	
<p>Standard 5. Students will understand existing and potential safety hazards in the health care setting.</p>				
<p>Benchmark 5.1 Apply methods to control the spread of infection.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> Practice hand washing techniques (school nurse speaks to class and uses an activity with Glo-Germ). Describe the chain of infection. Demonstrate the use of barriers to prevent the spread of infection i.e. gloves, masks, gowns. (Practice the proper procedures for removing gloves using pudding or cake mix as the contaminate) 	ELA.RST.11-12.3	LA.12.3.2.a LA.12.1.6.k SC.12.1.1.d	CR.1.A.4 CR.3.B.4 CR.3.C.3	Alignment presumes that students must comprehend oral or written instructions to complete the task (CC: ELA.RST.11–12.3; NE: CR.1.A.4, LA.12.1.6.k, LA.12.3.2).



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<p>Benchmark 5.2 Identify personal and environmental safety practices.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> Apply principles of body mechanics. Implement the procedures to prevent injury and infection. Review emergency procedures i.e. fire, tornadoes, stolen baby, intruder, bomb threats. 	N/A	SC.12.1.1.d	CR.3.B.4	
<p>Standard 6. Students will demonstrate technical skills in health professions.</p>				
<p>Benchmark 6.1 Apply procedures for measuring and recording vital signs.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> Identify normal ranges for vital signs. i.e temperature, pulse, respiration and blood pressure. Practice taking and recording vital signs i.e. simulator arm for blood pressure and pulse. Locate and check carotid and radial pulse. Identify methods of obtaining body temperature. 	ELA.RST.11-12.3	LA.12.3.2.a LA.12.1.6.k	CR.1.A.4	Alignment presumes that students must comprehend oral or written instructions to complete the task (CC: ELA.RST.11–12.3; NE: CR.1.A.4, LA.12.1.6.k, LA.12.3.2).
<p>Benchmark 6.2 Apply skills to obtain training or certification in cardiopulmonary resuscitation, automated external defibrillator, foreign body airway obstruction and first aid.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> Use prescribed Red Cross, American Heart Association Guidelines, Nebraska Safety Council etc. Prepare and participate in the HOSA CPR/First Aid, EMT Team Event. 	N/A	N/A	CR.1.B.1 CR.10.D.3	If students are to be certified in CPR, they will need to be taught by a certified instructor.



Reference Standards Sources

- NHFSAC = National Healthcare Foundation Standards and Accountability Criteria
- HOSA = Health Occupation Students of America

Contributors

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Other Information

Suggestions for innovative teaching and learning strategies:	
Related assessments:	<ul style="list-style-type: none"> • Portfolios • Nebraska Career Connections • Nebraska Career Information Systems
Extended learning opportunities:	<ul style="list-style-type: none"> • Health Occupation Students of America • Family, Career and Community Leaders of America • 4-H • American Heart Association and Red Cross