

STRANDS AND STANDARDS

Exploring Health Science



Course Description

An exploratory and hands-on course designed to increase awareness of health science professions and explore opportunities in the Health Science pathway. The course explores legal and ethical behaviors, basic communication skills, basic structures and functions of the body, basic healthcare and first aid skills. Students will gain knowledge of the Career and Technical Student Organization (CTSO) associated with healthcare – HOSA: Future Health Professionals, and possible participation in the CTSO if available at their school.

Intended Grade Level	7-8
Units of Credit	0.5
Core Code	36.01.00.00.105
Concurrent Enrollment Core Code	N/A
Prerequisite	None
Skill Certification Test Number	N/A
Test Weight	N/A
License Area of Concentration	CTE; Secondary Education; Elementary
Required Endorsement(s)	
Endorsement 1	Health Science 6-8
Endorsement 2	Health Science Introduction
Endorsement 3	

STRAND 1

Demonstrate a well-rounded understanding of healthcare professions.

Standard 1

Compare and contrast health science career cluster pathways:

- Diagnostic Services
- Therapeutic Services
- Health Informatics
- Support Services
- Biotechnology Research and Development Services

Standard 2

Identify types of training levels, education, and credentials related to healthcare.

- Training levels
 - On-the-job training
 - Technical colleges
 - University studies
- Degrees
 - Associate
 - Bachelor
 - Master
 - Doctorate
- Certification vs. Licensing
 - Certification: provided by a private organization for the individual who has successfully met all the requirements and demonstrated their ability to perform their profession competently.
 - License: state grant of legal authority to practice a profession within a defined scope of practice.

Standard 3

Explore a career of interest.

- Use a career aptitude assessment tool for middle school students to identify student area of interest and aptitude. Options to consider using:
 - [YouScience](#) – check with your school/district CTE leadership to see if/how accounts set up. No cost.
 - [Keys to Success](#) – No cost.
- Research the educational/training requirements for a specific career of interest.

Performance Skill included – see below.

STRAND 2

Demonstrate an understanding of the importance of legal and ethical behavior related to healthcare.

Standard 1

Identify responsibilities in maintaining ethical standards, confidentiality, and the patient's rights.

- HIPAA law

- Recognize what the acronym stands represents.
- Confidentiality rules for healthcare providers.
- [Patient Care Partnership](#) concepts – American Hospital Association document

Standard 2

Identify and define terms related to the legal and ethical aspects of the healthcare industry.

- Malpractice/negligence
- Consent
- Invasion of privacy
- Quackery
- Hippocratic Oath
- Cultural competency
- Integrity

Standard 3

Compare and contrast sympathy and empathy.

STRAND 3

Demonstrate professional behaviors in the healthcare setting.

Standard 1

Demonstrate interpersonal communication skills.

- Active listening
- Verbal
- Non-verbal
- Written

Standard 2

Demonstrate other professional behaviors.

- Professional dress
- Punctuality
- Integrity
- Positive attitude
- Confidentiality
- Cleanliness/hygiene

Standard 3

Demonstrate the use of **basic** medical terminology.

- Anatomic planes
 - Frontal
 - Sagittal
 - Transverse/horizontal
- Directional terms
 - Anterior/Posterior
 - Medial/Lateral

- Superior/Inferior
- Proximal/Distal
- Superficial/Deep
- Abbreviations
 - Rx - prescription
 - Dx - diagnosis
 - Px - prognosis
 - Tx - treatment
 - Hx - history
 - Fx - fracture

STRAND 4

Apply basic scientific principles to the healthcare field.

Standard 1

Identify the levels of organization of the human body.

- Chemical
- Cell
- Tissue
- Organ
- Organ system
- Organism

Standard 2

Identify the different body systems to include **basic** structures and **basic** functions.

- Integumentary
- Skeletal
- Muscular
- Nervous
- Endocrine
- Respiratory
- Cardiovascular
- Lymphatic
- Digestive
- Urinary
- Reproductive

Standard 3

Describe the elements of disease transmission.

- Chain of infection
 - Infectious agent
 - Reservoir
 - Portal of exit
- Mode of transmission
 - Direct contact
 - Indirect contact

- Vector-borne
- Respiratory droplets
- Portal of entry
- Susceptible host
- Prevention of Infection
 - Stay home when sick.
 - Hand washing.
 - Cover nose and mouth when coughing/sneezing.
 - Use of appropriate personal protective equipment.
 - Gloves
 - Gowns
 - Masks
 - Eye protection

Performance Skill included – see below.

STRAND 5

Perform basic healthcare skills.

Standard 1

Perform basic vital signs and measurements.

- Respiration
- Pulse
- Height
- Weight
- Eye chart

Standard 2

Identify basic first aid techniques.

- Activate the Emergency Management System (EMS)
 - Dial 911
 - Be prepared with the following:
 - What happened
 - Location
 - Gender and approximate age of victim(s)
 - Suspected problem/injury – type and severity
 - Ongoing safety concerns or threats
 - Level of responsiveness of victim
 - Your contact information
 - Hang up only when instructed.
- Bleeding control
- Basic splinting
- Minor burn management

STRAND 6

Introduce students to the Career and Technical Student Organization (CTSO) for students interested in careers in healthcare – HOSA: Future Health Professionals.

Standard 1

Explore the national and state HOSA websites.

- National site – hosa.org
- Utah site - <https://www.uthosa.org>

Standard 2

Identify Middle School competitions of interest.

- Identify and describe at least one individual event.
- Identify and describe at least one team event.

Standard 3

Explore HOSA leadership, and service opportunities.

- Identify HOSA officer positions and their role/function.
- Research current National HOSA Service Project.
- Identify HOSA scholarship options.

Performance Skill included – see below.

Performance Skills

1. Create a [Health Career Display-Middle School](#) as per the HOSA competitive event guidelines.
2. Demonstrate correct glove removal and disposal.
3. Complete a project-based learning experience centered on a HOSA Middle School competitive event.

Workplace Skills

- Professional dress
- Teamwork/Collaboration
- Communication – written and verbal
- Conflict resolution
- Time management
- Critical thinking
- Research methods
- Problem solving
- Integrity
- Legal requirements/expectations