

Introduction to Health Science – Scope and Sequence

Course Name	Introduction to Health Science		Course = 1 Carnegie Unit Credit
Course Description	This two-semester Introductory Health Science course provides an overview of the challenging environments and occupations in the healthcare field. This course introduces students to the nine pathways that make up the health science cluster. In addition, students are provided a hands-on application of the foundational skills/ knowledge including health maintenance, employability skills, teamwork, healthcare systems, communications, and legal issues in healthcare. This course includes preparation for Basic Life Support for Healthcare Providers certification.		
Note:	This is a suggested scope and sequence for the course content. The content will work with any textbook or instructional resource. If locally adapted, make sure all competencies are covered. Please contact your local community college partner for credit options available.		
Schedule:	Schedule calculation based on 120 contact hours. 60% of instruction time should be geared toward meeting the course competencies in this scope document. The remaining 40% of the instructional time allows for guest speakers, student presentations, field trips, remediation, or other content topics.		
All courses taught in an approved CTE program must include Essential Skills embedded into the course content. The Essential Skills Framework for this course can be found at https://www.cde.state.co.us/standardsandinstruction/essentialskills Additional resource: National Health Science Standards			
Instructional Unit Topic	Suggested Length of Instruction	CTE or Academic Standard Alignment	Competency / Outcomes
History and Trends of HealthCare	4%	NHSS 3.1.4 Colorado SS. Standard 4: Civics	1. Examine early beliefs about the causes of disease and treatment and current beliefs about disease and treatment 2. Identify major events in the history of healthcare 3. Explore historical individuals 4. Investigate current trends or changes in health care.
Health Care Systems	5%	NHSS 3.1.1 Colorado SS.Standard 4: Civics	1. Describe types of private health care facilities 2. Analyze government health services agencies and the services offered 3. Describe services offered by voluntary or nonprofit agencies.

			4. Compare basic principles of different health insurance plans 5. Explain the purpose of organizational structures in health care facilities
Careers in Health Care	5%	NHSS 4.3, 4.3.1, 4.3.2	1. Explore Career Ladders: Educational requirements for associate's, bachelor's, and master's degrees 2. Understand Certification, registration, and licensure 3. Describe different healthcare careers by including a definition of the career, duties, educational requirements, and employment opportunities
Personal and Professional Qualities of a Health Care Worker	5%	NHSS: 4.11, 6.21, 2.11, 2.12, 2.13, 2.14, 2.15, 2.16, 8.11, 8.12, 8.21, 8.22, 8.23	1. Explain how diet, rest, exercise, good posture, and avoiding tobacco, alcohol, and drugs contribute to good health 2. Standards of professional appearance 3. Characteristic profiles of a healthcare worker that include personal/professional traits or attitudes 4. Importance of the communication process 5. Understand the concepts of teamwork. 6. Basic characteristics of leaders. 7. Effects of stress within the healthcare field. 8. Time management, problem-solving, and goal-setting...
Legal and Ethical Responsibilities	5%	NHSS: 4.11, 4.12, 6.22	1. Define following: malpractice; negligence, assault and battery, invasion of privacy, false imprisonment, abuse, and defamation. 2. Describe types of consent health care. 3. Define <i>privileged communications</i>. 4. State the legal regulations that apply to health care records 5. Define HIPPA and explain how it provides confidentiality for health care information 6. Basic rules of ethics for healthcare personnel 7. Rights of the patient who is receiving health care 8. Justify professional standards by explaining how they help meet legal/ethical requirements

			9. Define, pronounce, and spell all key terms
Medical Terminology	3%	NHSS: 2.21, 2.22	1. Identify basic medical abbreviations selected from a standard list 2. Define prefixes, suffixes, and word roots/Combining forms 3. Define, pronounce, and spell all key terms
Anatomy and Physiology	4%	NHSS: 1.11, 1.13, 1.21	1. Apply the appropriate terminology to major organs and systems of the human body 2. Directional terms 3. Identify the major functions of each body systems 4. Describe basic diseases affecting each of the body systems
Human Growth and Development and Healthcare across the lifespan	3%		1. Identify physical, mental, emotional, and social developments that occur during each of the life stages 2. Recognize ways that life stages affect an individual's needs
Cultural Diversity	4%	NHSS: 4.11, 6.21, 2.11, 2.12, 2.13, 2.14, 2.15, 2.16, 8.11, 8.12, 8.21, 8.22, 8.23	1. List the basic characteristics of culture 2. Differentiate between culture, ethnicity, and race 3. Identify methods that can be used to show respect for cultural diversity
Computers and Technology in Health Care	2%	NHSS: 3.1.3	1. Describe computer and technology applications currently being used in today's health care. 2. Illustrate how computers and technology have improved health care communication Identify precautions that must be taken to maintain the confidentiality of patient
Promotion of Safety	4%	NHSS: 7.11, 7.12, 7.21, 7.41, 7.42, 10.12,	1. Define Body mechanics 2. Observe all safety standards established by OSHA, especially the Occupational Exposure to Hazardous Chemicals Standard and the Bloodborne Pathogen Standard. 3. List the four main classes of fire extinguishers

Infection Control	4%	NHSS: 7.11, 7.12, 7.21, 7.41, 7.42, 10.12,	1. Identify classes of microorganisms by describing the characteristics of each class. 2. List components of the chain of infection. 3. Differentiate between antiseptics, disinfection, and sterilization. 4. Wash hands following aseptic technique 5. Follow basic principles of chemical disinfection 6. Don sterile gloves with no contamination 7. Don and remove a transmission-based isolation mask, gloves, and gown
Vital Signs	2%	NHSS: 7.11, 7.12, 7.21, 7.41, 7.42, 10.12,	1. list the five main vital signs and normal ranges 2. Convert fahrenheit to Celsius and vice versa
First Aid	4%	NHSS: 7.11, 7.12, 7.21, 7.41, 7.42, 10.12,	1. Opportunity to obtain industry certification level of HeartSaver CPR AED from American Heart 2. Describe first aid for: a. Bleeding and wounds b. Shock c. Poisoning d. Burns e. Heat exposure f. Cold exposure g. Bone and joint injuries, including fractures h. Specific injuries to the eyes, head, nose, ears, chest, abdomen, and genital organs. i. Sudden illness including heart attack, stroke, fainting, convulsions, and diabetic reactions j. Apply dressings and bandages, observing all safety precautions and using the circular, spiral, figure-eight and recurrent or finger wrap

Health Care Career Skills Exploration And Preparation	6%	NHSS 3.1.4	1. Identify job-keeping skills 2. Write a cover letter containing all required information and using correct form for letters 3. Prepare a resume containing all necessary information and meeting standards for neatness and correctness 4. Complete a job application form that meets standards of neatness and accuracy 5. Demonstrate how to participate in a job interview, including wearing correct dress and meeting standards established in this chapter 6. Calculate an accurate budget for a one-month period, accounting for fixed expenses and variable expenses without exceeding net monthly income 7. Explore skills necessary in a variety of health care careers.
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Academic Standards Alignment

Colorado CTE courses are required to integrate academic and essential skills into course content. The following academic standards have been identified as aligned to this course and should be integrated throughout instruction.

[CO CTE Academic Standards Resources](#) (Rubrics, integration strategies, etc)

[CDE Colorado Academic Standards Online](#) (Online standards lookup tool)

Reading, Writing, & Communicating

Standard 1: Oral Expression and Listening

- **Prepared Graduate 1:** Collaborate effectively as group members or leaders who listen actively and respectfully; pose thoughtful questions, acknowledge the ideas of others; and contribute ideas to further the group's attainment of an objective.
- **Prepared Graduate 2:** Deliver effective oral presentations for varied audiences and varied purposes.

Standard 2: Reading for All Purposes

- **Prepared Graduate 3:** Read a wide range of literary texts to build knowledge and to better understand the human experience.
- **Prepared Graduate 4:** Read a wide range of informational texts to build knowledge and to better understand the human experience.

Standard 3: Writing and Composition .

- **Prepared Graduate 9:** Demonstrate mastery of their own writing process with clear, coherent, and error-free polished products.

Standard 4: Research Inquiry and Design

- **Prepared Graduate 10:** Gather information from a variety of sources; analyze and evaluate its quality and relevance; and use it ethically to answer complex questions.

Note: Mathematics and Science standards will be added in the future. Visit the [Colorado Academic Standards](#) page for the most current version.