



Regional Occupational Program

Health Careers 2025-2026

COURSE DESCRIPTION

Health Careers is designed to provide students with foundational knowledge and exposure to a variety of careers and employment in the Health Care and Medical Technology Industry Sector. Students learn about careers available in health services, diagnostic technology, rehabilitation services, administration, and patient care through a series of instructional modules focused on occupations such as Emergency Medical Technician, Dentistry, Ophthalmology, Pharmacology, Therapeutic Services, and Sports Medicine. Students conduct career research can explore additional careers in the vast health care field, such as nursing medical assisting, and more. Medical terminology, legal and ethical considerations and taking and recording of vital signs are included in the course. Additional community classroom training is an optional component of this course.

Course Information

Course Length: 1 Year
 Prerequisite: None
 Course Level: Introductory
 UC: No
 Articulated: No
 Industry Cert.: No
 Industry Sector: Health Science and Medical Technology
 Pathway: Multiple Pathways
 CALPADS: 7900

O*Net SOC Codes

31-9092 Medical Assistants
 31-1121 Home Health Aides

Legend

CTE - PS CTE Pathway Standards
 CRP Career Ready Practices
 CTE - AS CTE Anchor Standards
 CCSS Common Core State Standards
 ISTE International Society for Technology in Education

*Includes updates from 24/25 Health Science and Medical Technology Advisory
[Advisory Minutes](#)*

Health Careers

Course Orientation

- a. Discuss objectives for this course, including competencies, teacher expectations, classroom policies, and procedures.
- b. Identify and discuss the acquisition of transferable skills (communication, collaboration, creativity, and critical thinking) and their importance to being college and career ready and for future personal and professional success.
- c. Review objectives, competencies, and course syllabus.
- d. Discuss student and teacher expectations, including behavior, class rules, appropriate dress, pre-course knowledge, and grading policies, including enrollment and attendance requirements and procedures, and classroom/school safety and disaster procedures.
- e. Discuss next steps in course sequence related to the career pathway, the need for reinforcement of basic skills, transferrable skills, and postsecondary and career options.
- f. Discuss the Big Six: Career Ready Essentials and the Standards for Career Ready Practice as they relate to this course, all aspects of the industry sector, and being college and career ready.

Big Six: Career Ready Essentials

1. Effective Communication	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ol style="list-style-type: none"> a. Demonstrate effective verbal communication and conflict resolution skills. b. Use the writing process to develop written communication with the appropriate tone, organization, and format for the identified audience. c. Explain the effect of interpersonal skills on one's ability to communicate effectively and develop relationships. d. Describe the impact of ineffective communication on business relationships. e. Analyze the impact of vocabulary, body language, and tone on verbal communication. f. Demonstrate active listening skills. g. Accurately interpret industry-specific written communication. h. Model responsible and effective use of various communication technologies. i. Identify valid and reliable digital reference and resource materials. j. Gather information from multiple digital sources to compare and contrast, synthesize, and summarize. k. Identify and use appropriate communication and collaboration technologies. l. Utilize technology to problem solve, accomplish tasks, and to produce or publish products. 		<u>1</u> <u>2</u> <u>11</u>	<u>2</u> <u>3</u> <u>4</u> <u>5</u> <u>7</u> <u>8</u> <u>9</u> <u>10</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u> <u>SLS</u> <u>11-12.2</u> <u>9-10</u> <u>11-12.1</u> <u>11-12.1d</u> <u>WS</u> <u>11-12.7</u> <u>11-12.6</u>	<u>1b,c</u> <u>2c</u> <u>3b,c</u> <u>5c</u> <u>6b,c,d</u>
2. Collaboration, Creativity, and Critical Thinking	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ol style="list-style-type: none"> a. Demonstrate critical thinking skills for a variety of purposes and in different settings. b. Collaborate to reach consensus on an identical objective through the sharing of knowledge, tasks, and learning. c. Discuss the importance of the critical thinking process to real-world applications. 		<u>2</u> <u>4</u> <u>5</u> <u>7</u>	<u>2</u> <u>3</u> <u>4</u> <u>5</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u>	<u>1c</u> <u>3c,d</u> <u>4a-d</u> <u>5c,d</u>

<ul style="list-style-type: none"> d. Evaluate the impact of creative thinking on problem solving and innovation in real-world applications. e. Compile work that demonstrates the process used to (elaborate, refine, analyze) evaluate original ideas and maximize creative efforts. f. Apply divergent and convergent thinking to the development of an original idea or solution. g. Examine real-world limits to adopting ideas. h. Demonstrate creative thinking (preparation, insight, evaluation, elaboration, and communication) to create a new idea or concept. i. Assume shared responsibility for collaborative work, and value the individual contributions made by each team member. j. Evaluate evidence, arguments, claims, and beliefs to identify connections. k. Identify bias, prejudice, propaganda, self-deception, distortion, and misinformation. l. Produce intellectual, informational, or material products that serve an authentic purpose. m. Work effectively and respectfully with those from diverse backgrounds or cultures. n. Demonstrate respect, trust, commitment, and the ability to compromise in collaborative projects. 		<u>9</u> <u>10</u> <u>11</u>	<u>7</u> <u>8</u> <u>9</u> <u>11</u>	<u>SLS</u> <u>9-10</u> <u>11-12.1</u> <u>11-12.1d</u> <u>11-12.2</u> <u>WS</u> <u>11-12.7</u> <u>11-12.6</u>	<u>6c</u> <u>7b,c,d</u>
3. Leaders and Teams: Roles and Responsibilities	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Determine the individual and team members' roles and responsibilities. b. Demonstrate leadership skills and qualities (i.e., reliability, negotiation skills, initiative, positive reinforcement, recognition of others' efforts, problem-solving skills, conflict resolution, and delegation). c. Compare and contrast leadership styles and their effectiveness in various situations. d. Organize and delegate responsibilities in a team setting to encourage ideas, perspectives, and contributions from all team members. e. Develop a strong sense of team identity by brainstorming solutions, volunteering, assisting others, practicing respect and courtesy, and taking initiative. f. Examine situations in which a follower becomes the leader. g. Describe twenty-first-century skills required across all occupations. h. Identify and discuss the characteristics of a successful team (i.e., leadership, cooperation, and effective decision-making). i. Leverage social and cultural differences to increase innovation and quality of work. 		<u>7</u> <u>8</u> <u>9</u>	<u>3</u> <u>7</u> <u>8</u> <u>9</u> <u>11</u>	<u>SLS</u> <u>11-12.2</u> <u>9-10</u> <u>11-12.1</u> <u>11-12.1d</u> <u>WS</u> <u>11-12.6</u>	<u>7a,c</u>
4. Legal, Ethical, and Environmental Considerations	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Demonstrate industry specific ethical and legal practices. b. Identify eco-friendly industry specific practices and resources. c. Identify local, state, and federal regulatory agencies, entities, laws, and regulations. 		<u>5</u> <u>7</u> <u>8</u>	<u>3</u> <u>5</u> <u>7</u>	<u>WS</u> <u>11-12.6</u> <u>11-12.7</u>	<u>2a,b</u> <u>3a,b</u> <u>5c</u>

<ul style="list-style-type: none"> d. Identify discrimination based on race, nationality, religion, gender, age, disability, or sexual orientation. e. Summarize the ethical and legal implications of workplace discrimination and harassment. f. Explain the concept of corporate citizenship. g. Examine an employer's role in protecting the health and welfare of employees, the community, and the environment. h. Analyze current environmental laws and regulations and their impact on industry. i. Compare and contrast both society's and industry's impact on the environment. 		<u>12</u>	<u>8</u> <u>9</u> <u>11</u>	<u>SLS</u> <u>9-10</u> <u>11-12.1</u> <u>11-</u> <u>12.1d</u> <u>11-12.2</u>	<u>6c</u>
5. Personal Growth and Career Planning	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Demonstrate continued personal development and growth. b. Develop and manage a personal growth and career plan. c. Explain the relationship between sound financial habits and financial security. d. Create and manage a personal financial plan. e. Demonstrate initiative in achieving personal and professional goals. f. Apply time management strategies to meet deadlines. g. Demonstrate a growth mindset through flexibility and a positive attitude. h. Select and demonstrate appropriate job-search and retention techniques. i. Demonstrate strategies to prepare for employment. j. Demonstrate interpersonal skills appropriate for the workplace. k. Elaborate on the importance of perseverance to personal and professional success. l. Discover personal career interests, aptitudes, and skills. 		<u>1</u> <u>2</u> <u>3</u> <u>4</u> <u>6</u>	<u>2</u> <u>3</u> <u>4</u> <u>7</u> <u>8</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u> <u>SLS</u> <u>9-10</u> <u>11-12.1</u> <u>11-12.1d</u> <u>11-12.2</u> <u>WS</u> <u>11-12.6</u>	<u>1a</u> <u>3a,c</u> <u>4d</u> <u>6a,d</u> <u>7b</u>
6. Workplace Safety and Personal Wellness	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Demonstrate proper industry specific safe work practices to prevent injury or illness. b. Assess the potential impact of goal setting on personal and professional success. c. Describe the role of security and emergency procedures in workplace safety. d. Describe the effect of preventative measures on emergencies in the workplace. e. Identify and describe the causes, prevention, and treatment of common accidents. f. Identify local, state, and federal agencies that regulate workplace safety. g. Explain the role of the California Occupational Safety and Health Administration (Cal-OSHA) and the Environmental Protection Agency (EPA). h. Discuss the basics of system operations. i. Demonstrate the proper use of personal protective equipment (PPE). j. Explain the purpose of and accurately interpret a Safety Data Sheet (SDS). k. Identify hazardous materials and chemicals. l. Demonstrate proper procedures to respond to work-related accidents and injuries. m. Describe how ergonomics, housekeeping, and maintenance are related to accidents and injuries. 		<u>2</u> <u>5</u> <u>6</u> <u>8</u> <u>12</u>	<u>2</u> <u>5</u> <u>6</u> <u>7</u> <u>8</u> <u>10</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u> <u>WS</u> <u>11-12.7</u> <u>11-12.6</u> <u>SLS</u> <u>9-10</u> <u>11-12.1</u> <u>11-12.1d</u>	<u>1a,d</u> <u>2a,d</u> <u>5b</u>

<p>n. Demonstrate cyber ethics, cyber safety, and cybersecurity.</p> <p>o. Assess the potential impact of preventative physical and mental health measures on workplace safety.</p>					
Health Careers Units of Instruction					
7. The History of Healthcare	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<p>a. Explain how the history of health care has led to the advances of current procedures, practices, and philosophies.</p> <p>b. Identify three scientists and explain what they contributed to medicine.</p> <p>c. Choose one era in the history of health care and explain how medical knowledge and technology changed during that time.</p> <p>d. Describe the role Florence Nightingale had in advancing the role of nursing.</p> <p>e. Identify and describe two advances in medicine in the twentieth century.</p> <p>f. Identify a possible advancement in medicine for the twenty-first century.</p> <p>g. List two ethical questions or problems resulting from medical advancements.</p>		<p><u>1</u></p> <p><u>2</u></p> <p><u>5</u></p> <p><u>11</u></p>	<p><u>1</u></p> <p><u>2</u></p> <p><u>5</u></p> <p><u>11</u></p>	<p><u>LS</u></p> <p><u>9-10</u></p> <p><u>11-12.6</u></p> <p><u>WS</u></p> <p><u>11-12.7</u></p>	
8. Health Care Today	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<p>a. Explain why all components of the health care system must work together to meet the needs of the patient.</p> <p>b. Describe why it is important for health care workers to stay informed of trends in health care reform.</p> <p>c. Identify four government agencies involved in health care and their roles.</p> <p>d. Explain how not-for-profit organizations provide support for health care and list two examples.</p> <p>e. Compare and contrast the differences between the service side and the business side of health care.</p> <p>f. Identify three reasons for the rising cost of health care.</p> <p>g. Describe the impact on patients and health care providers when people don't have health insurance or a family doctor.</p> <p>h. Discuss current trends in health care reform including the Affordable Care Act (ACA).</p>	<p><u>B1.0</u></p> <p><u>B2.0</u></p>	<p><u>1</u></p> <p><u>2</u></p> <p><u>5</u></p> <p><u>11</u></p>	<p><u>1</u></p> <p><u>2</u></p> <p><u>5</u></p> <p><u>11</u></p>	<p><u>LS</u></p> <p><u>9-10</u></p> <p><u>11-12.6</u></p> <p><u>WS</u></p> <p><u>11-12.7</u></p>	
9. Career Planning and Alignment to Careers in Health	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<p>a. Demonstrate strategies for researching HSMT careers and describe career pathways within the HSMT fields.</p> <p>b. Describe the relationship between career levels and how to achieve job progression.</p> <p>c. Identify career goals and create a personal professional career plan.</p> <p>d. Use online resources such as ONET and the Dictionary of Occupational Titles to research California Health Services and Medical Technology (HSMT) Career Pathways</p>	<p><u>A1.6</u></p>	<p><u>1</u></p> <p><u>2</u></p> <p><u>3</u></p> <p><u>5</u></p> <p><u>11</u></p>	<p><u>1</u></p> <p><u>2</u></p> <p><u>3</u></p> <p><u>5</u></p> <p><u>11</u></p>	<p><u>LS</u></p> <p><u>9-10</u></p> <p><u>11-12.6</u></p> <p><u>SLS</u></p> <p><u>11-12.2</u></p>	

<p>e. Create a career ladder for:</p> <ul style="list-style-type: none"> • Biotechnology Research and Development Pathway • Patient Care Career Pathway • Health Care Administrative Services • Healthcare Operational Support Services Pathway • Public and Community Health Pathway Mental and Behavioral Health Pathway <p>f. Identify and explain the following for a career in each HSMT Career Pathway</p> <ul style="list-style-type: none"> • Duties • Pay • Job Outlook • Employers who hire people in this career pathway • Required education • Required certification, registration or licensure • Colleges that offer education and training for this career pathway • Available opportunities to gain experience in this career pathway <p>g. Identify core knowledge, skills, attitudes, personal, and professional characteristics necessary for all health care workers.</p> <p>h. Describe why it is important to identify your knowledge, skills, and abilities when choosing a career.</p> <p>i. Complete career interest assessments.</p> <p>j. Analyze and discuss your interest and career assessment results.</p> <p>k. Conduct an informational interview with a health professional.</p> <p>l. Develop SMART (specific, measurable, attainable/achievable, relevant, and timely) career goals.</p>				<p>WS 11-12.7</p>	
<p>10. Legal and Ethical Responsibilities in Health Care Fields</p>	<p>CTE - PS</p>	<p>CRP</p>	<p>CTE - AS</p>	<p>CCSS</p>	<p>ISTE</p>
<p>a. Demonstrate basic knowledge of the professional, ethical, and legal behavior consistent with the laws and practices in the health care field.</p> <p>b. Understand the rights of patients/clients.</p> <p>c. Explain how bias, prejudice, or stereotype can cause barriers to relationships and the quality of health care.</p> <p>d. Understand the ethical and legal implications for both employers and employees with regard to discrimination based on race, nationality, religion, gender, age, disability, or sexual orientation.</p> <p>e. Define HIPAA and explain how it provides confidentiality for health care information.</p>	<p>A2.0 B11.0</p>	<p>1 2 5 8 11</p>	<p>1 2 5 8 11</p>	<p>LS 9-10 11-12.6 SLS 11-12.1d WS 11-12.7</p>	

f. Understand the importance of safe, welcoming, and harassment-free work environments and that bullying behavior or harassment, sexual or otherwise, by employees and employers, is illegal and punishable by a court of law.					
11. Medical Terminology	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Select and apply correct medical terminology in workplace situations. b. Define prefixes, suffixes, word roots, and combining forms. c. Spell and pronounce common medical terms correctly. d. Recognize, identify and use common, approved medical abbreviations. e. Use a medical dictionary. 	B5.0	<u>1</u> <u>2</u> <u>5</u>	<u>1</u> <u>2</u> <u>5</u>	LS 9-10 11-12.6 WS 11-12.7	
12. Measuring and Recording Vital Signs	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Explain how to collect data regarding a patient’s symptoms. b. Demonstrate how to take and record patient’s vital signs. c. Demonstrate knowledge of the proper procedures and protocols to measure and record temperature, pulse, respirations, and blood pressure accurately. d. Explain the collection of information or data about the patient’s symptoms and vital signs. e. Examine and discuss factors that affect pulse rate. Accurately measure, record, and describe pulse rate. f. Identify the normal ranges for respiration, systolic pressure, and diastolic pressure. Demonstrate the ability to measure blood pressure. 	B4.4	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	LS 9-10 11-12.6 RSTS 9-10 11-12.4 WS 11-12.7	
13. Athletic Trainer Careers	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Demonstrate how sports medicine professionals help individuals achieve optimal health and performance goals. b. Describe the training and licensing for the Athletic Trainer. c. Demonstrate treatment procedures for RICE, compression bandaging, splinting, and spine board. d. Recognize prevention, warning signs, and treatment of heart problems in athletics. e. Identify steps to identify, treat, and prevent spine and brain injuries. f. Recognize the dangers of steroids and other substances claiming to boost performance. 	B9.0	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	LS 9-10 11-12.6 RSTS 9-10 11-12.4 WS 11-12.7	
14. Physical and Occupational Therapist Careers	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Demonstrate procedures for rehabilitation using cognitive therapy activities for both adults and children. b. Describe the difficulties faced by learning disabled and stroke patients. c. Compare and contrast the differences between PT and OT. d. Describe how Therapists evaluate patients. 	B7.2	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	LS 9-10 11-12.6 RSTS	

<ul style="list-style-type: none"> e. Explain the purpose of the Plan of Care. f. Demonstrate treatment exercises prescribed by PT/OT practitioners. g. Identify the differences between pediatric and adult therapies. 				<u>9-10</u> <u>11-12.4</u> <u>WS</u> <u>11-12.7</u>	
15. Emergency Medical Technician Careers	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Explain and demonstrate the role of Emergency Medical Technician in the health care delivery system. b. Identify the steps for primary survey c. Recognize the difference between virus and bacterial disease and how to prevent disease transmission. d. Identify how to control bleeding, common types of wounds, and bandaging for various wounds. e. Identify the first aid steps for common emergencies: choking, poison, and burns. f. Recognize the signs of heart attack and how to perform CPR and the AED. 	<u>B10.3</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u> <u>RSTS</u> <u>9-10</u> <u>11-12.4</u> <u>WS</u> <u>11-12.7</u>	
16. Dentistry Careers	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Identify the roles of dental professionals and the preparation for each occupation. b. Recognize the parts of the jaw, teeth, and mouth. c. Identify appropriate dental care at each developmental stage. d. Identify common dental problems. e. Recognize how to correct common dental problems. f. Recognize common diseases of the teeth, gums, jaw, and mouth. g. Demonstrate how compounding is used to make custom medication sole of prosthetics in dental health. 		<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u> <u>RSTS</u> <u>9-10</u> <u>11-12.4</u> <u>WS</u> <u>11-12.7</u>	
17. Pharmacology Careers	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<ul style="list-style-type: none"> a. Demonstrate the day-to-day activities of a typical pharmacy and an understanding of the importance of accuracy and teamwork. b. Identify the role of pharmacy professionals and the preparation for each occupation. c. Demonstrate how to interpret drug labels and warnings. d. Demonstrate correct measurements for dosages. e. Compare and contrast pill identification methods. f. Identify common prescription errors. 	<u>B7.0</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u> <u>RSTS</u> <u>9-10</u> <u>11-12.4</u> <u>WS</u> <u>11-12.7</u>	

18. Ophthalmology Careers	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<p>a. Perform the duties of Optician, Optometrist, and Ophthalmologist as eye care professionals.</p> <p>b. Recognize parts of the eye and how vision works.</p> <p>c. Recognize how to correct common vision problems.</p> <p>d. Recognize common diseases that cause vision impairment.</p> <p>e. Describe the use of LASIK surgery to correct a vision problem.</p>		<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>1</u> <u>2</u> <u>5</u> <u>6</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u> <u>RSTS</u> <u>9-10</u> <u>11-12.4</u> <u>WS</u> <u>11-12.7</u>	
19. Advanced HSMT Career Research and Exploration	CTE - PS	CRP	CTE - AS	CCSS	ISTE
<p>Note to Teachers:</p> <p>1) Using students' career exploration and career planning results, develop additional modules to introduce and engage students in the health careers of their choice.</p> <p>2) Add as many modules per student interests and class schedule.</p>		<u>1</u> <u>2</u> <u>5</u> <u>11</u>	<u>1</u> <u>2</u> <u>5</u> <u>11</u>	<u>LS</u> <u>9-10</u> <u>11-12.6</u> <u>WS</u> <u>11-12.7</u>	

Standards Alignment

The curricula have been aligned with the CTE Model Curriculum Standards released in 2013. Each industry sector was updated to meet the increased rigor and relevancy requirements of the Common Core State Standards. The curriculum also includes the new Standards for Career Ready Practices.

Standards for Career Ready Practice

1. *Apply appropriate technical skills and academic knowledge.*
2. *Communicate clearly, effectively, and with reason.*
3. *Develop an education and career plan aligned with personal goals.*
4. *Apply technology to enhance productivity.*
5. *Utilize critical thinking to make sense of problems and persevere in solving them.*
6. *Practice personal health and understand financial literacy.*
7. *Act as a responsible citizen in the workplace and the community.*
8. *Model integrity, ethical leadership, and effective management.*
9. *Work productively in teams while integrating cultural and global competence.*
10. *Demonstrate creativity and innovation.*
11. *Employ valid and reliable research strategies.*
12. *Understand the environmental, social, and economic impacts of decisions.*

CTE Anchor Standards—Common Core English Language Arts Alignment

Anchor Standard 1: Academics

Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the industry sector alignment matrix for identification of standards. Note: alignment listed within each sector.

Anchor Standard 2: Communications

Language Standard: Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the (career and college) readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. LS 9-10, 11-12.6

Anchor Standard 3: Career Planning and Management

Speaking and Listening Standard: Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. SLS 11-12.2

Anchor Standard 4: Technology

Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments and information.

Anchor Standard 5: Problem Solving and Critical Thinking

Writing Standard: Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem, narrow or broaden the inquiry when appropriate, and synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. WS 11-12.7

Anchor Standard 6: Health and Safety

Reading Standards for Science and Technical Subjects: Determine the meaning of symbols, keywords, and other domain-specific words and phrases as they are used in a specific scientific or technical context. RSTS 9-10, 11-12.4

Anchor Standard 7: Responsibility and Flexibility

Speaking and Listening Standard: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners, building on others' ideas and expressing their own clearly and persuasively. SLS 9-10, 11-12.1

Anchor Standard 8: Ethics and Legal Responsibilities

Speaking and Listening Standard: Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the work. SLS 11-12.1d

Anchor Standard 9: Leadership and Teamwork

Speaking and Listening Standard: Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed. SLS 11-12.1b

Anchor Standard 10: Technical Knowledge and Skills

Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. WS 11-12.6

Anchor Standard 11: Demonstration and Application

Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in the classroom, laboratory, and workplace settings, and the career technical student organization. Note: no alignment evident for this standard. WS 11-12.6

CTE Model Curriculum Standards—Industry Sectors and Pathways

Health Science and Medical Technology

A. Biotechnology Pathway

- A1.6 *Explore and outline the various science and non-science fields and careers associated with biotechnology.*
- A2.0 *Understand the ethical, moral, legal, and cultural issues related to the use of biotechnology research and product development.*
- A2.5 *Describe the dilemma of health care costs related to advancements in biotechnology and public access to treatments.*

B. Patient Care Pathway

- B1.0 *Recognize the integrated systems approach to health care delivery services: prevention, diagnosis, pathology, and treatment.*
- B4.4 *Collect and synthesize information or data about the patient's symptoms and vital signs.*
- B5.0 *Know the definition, spelling, pronunciation, and use of appropriate terminology in the health care setting.*
- B7.2 *Differentiate between normal and abnormal patient health status.*
- B9.0 *Implement wellness strategies for the prevention of injury and disease.*
- B10.3 *Evaluate potential causes and methods of transmitting infections and how to apply standard precautionary guidelines.*
- B11.0 *Comply with hazardous waste disposal policies and procedures, including documentation, to ensure that regulated waste is handled, packaged, stored, and disposed of in accordance with federal, state, and local regulations.*

ISTE Standards for Students

1. Empowered Learner- *Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.*

a) Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes.

b) Students build networks and customize their learning environments in ways that support the learning process.

c) Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways

d) Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

2. Digital Citizen- *Students recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal, and ethical.*

a) Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.

b) Students engage in positive, safe, legal, and ethical behavior when using technology, including social interactions online or when using networked devices.

c) Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

d) Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

3. Knowledge Constructor- *Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others.*

a) Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.

b) Students evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.

c) Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

d) Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories, and pursuing answers and solutions.

4. Innovative Designer- *Students use a variety of technologies within a design process to identify and solve problems creating new, useful, or imaginative solutions.*

a) Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems.

b) Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

c) Students develop, test, and refine prototypes as part of a cyclical design process.

d) Students exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems.

5. Computational Thinker- *Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.*

a) Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models, and algorithmic thinking in exploring and finding solutions.

b) Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.

c) Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.

d) Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

6. Creative Communicator- *Students communicate clearly and express themselves creatively for a variety of purposes using platforms, tools, styles, formats, and digital media appropriate for their goals.*

a) Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

b) Students create original works or responsibly repurpose or remix digital resources into new creations.

c) Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models, or simulations.

d) Students publish or present content that customizes the message and medium for their intended audiences.

7. Global Collaborator- *Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.*

a) Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.

b) Students use collaborative technologies to work with others, including peers, experts, or community members, to examine issues and problems from multiple viewpoints.

c) Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.

d) Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.