Texas CTE: Health Science

Health Science Theory (2025)

Implementation. The provisions of this section shall be implemented by school districts beginning with the 2024-2025 school year. A

1 **No later than August 31, 2024, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills identified in this section.** A.1

2 **If the commissioner makes the determination that instructional materials funding has been made available, this section shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.** A.2

3 **If the commissioner does not make the determination that instructional materials funding has been made available under this subsection, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that this section shall be implemented for the following school year.** A.3

General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology and at least one credit in a course from the health science career cluster. Recommended prerequisite: Medical Terminology. Recommended corequisite: Health Science Clinical. Students shall be awarded one credit for successful completion of this course. B

b **General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology and at least one credit in a course from the health science career cluster. Recommended prerequisite: Medical Terminology. Recommended corequisite: Health Science Clinical. Students shall be awarded one credit for successful completion of this course.** B

Int Skip to main content **:areer and technical education instruction provides content aligned with hallenging academic standards, industry-relevant technical knowledge, and**

college and career readiness skills for students to further their education and succeed in current and emerging professions. C.1

2 **The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.** C.2

3 **The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will become familiar with industry-based standards for documenting and maintaining medical information; research industry employment requirements, including education, certification, and licensing requirements; and evaluate ethical and legal responsibilities of health science professionals. Students will employ hands-on experiences for continued clinical knowledge and skill development.** C.3

4 **To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.** C.4

5 **The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to learn the knowledge and skills necessary to pursue a health science career through further education and employment.** C.5

6 **Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.** C.6

7 **Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.** C.7

8 **Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.** C.8

Knowledge and skills. D

1 **The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:** D.1

A express ideas in a clear, concise, and effective manner; D.1.A

B exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and D.1.B

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C model industry expectations of professional conduct such as attendance, punctuality, appropriate professional dress, proper hygiene, and time management. D.1.C

2 **The student demonstrates patient-centered skills and interactions that foster trust and lead to a quality customer service experience. The student is expected to:** D.2

A demonstrate care, empathy, and compassion; D.2.A

B communicate medical information accurately and efficiently in language that patients can understand; and D.2.B

C comply with Health Insurance Portability and Accountability Act (HIPAA) policy standards. D.2.C

3 **The student applies mathematics, science, English language arts, and social studies in health science. The student is expected to:** D.3

A solve mathematical calculations appropriate to situations in a healthcare-related environment; D.3.A

B express ideas clearly in writing and develop skills in documentation related to health science; D.3.B

C interpret complex technical material related to the health science industry; D.3.C

D summarize biological and chemical processes in the body such as maintaining homeostasis; and D.3.D

E research topics related to health science such as the global impact of disease prevention. D.3.E

4 **The student demonstrates verbal, non-verbal, and electronic communication skills. The student is expected to:** D.4

A demonstrate therapeutic communication appropriate to the situation; D.4.A

B use appropriate verbal and non-verbal skills when communicating with persons with sensory loss and language barriers in a simulated setting; and D.4.B

C use electronic communication devices in the classroom or clinical setting appropriately. D.4.C

5 **The student analyzes and evaluates communication skills for maintaining healthy relationships in the healthcare workplace. The student is expected to:** D.5

A evaluate how healthy relationships influence career performance; D.5.A

B identify the role of communication skills in building and maintaining healthy relationships; D.5.B

C demonstrate strategies for communicating needs, wants, and emotions in a healthcare setting; and D.5.C

D evaluate the effectiveness of conflict-resolution techniques in various simulated healthcare workplace situations. D.5.D

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6 **The student documents and records medical information into a permanent health record. The student is expected to:** D.6

- A research document formats such as dental or medical records; D.6.A
- B prepare health documents or records according to industry-based standards; and D.6.B
- C record health information on paper and electronic formats such as patient history, vital statistics, and test results. D.6.C

7 **The student describes industry requirements necessary for employment in health science occupations. The student is expected to:** D.7

- A research education, certification, licensing, and continuing education requirements and salary related to specific health science careers; and D.7.A
- B practice employment procedures for a specific health science career such as resume building, application completion, and interviewing. D.7.B

8 **The student identifies problems and participates in the decision-making process. The student is expected to:** D.8

- A apply critical-thinking, adaptability, and consensus-building skills to solve problems relevant to health science; D.8.A
- B evaluate the impact of decisions in health science; and D.8.B
- C suggest modifications to a decision or plan based on healthcare outcomes. D.8.C

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9 **The student demonstrates comprehension and proficiency of clinical skills used by health science professionals in a classroom or clinical setting. The student is expected to:** D.9

- A comply with specific industry standards related to safety requirements; D.9.A
- B employ medical vocabulary specific to the healthcare setting; D.9.B
- C perform admission, discharge, and transfer functions in a simulated setting; D.9.C
- D demonstrate skills related to assisting patients with activities of daily living such as dressing, undressing, grooming, bathing, and feeding; D.9.D
- E determine proper equipment needed for patient ambulation such as gait belts, wheelchairs, crutches, or walkers; D.9.E
- F demonstrate skills related to assessing range of motion and assisting with mobility, including positioning, turning, lifting, and transferring patients for treatment or examination; D.9.F
- G role play techniques used in stressful situations such as situations involving trauma and chronic and terminal illness; D.9.G
- H demonstrate first aid, vital signs, cardiopulmonary resuscitation, and automated external defibrillator skills; and D.9.H
- I identify basic skills specific to a health science profession such as medical assistant, dental assistant, emergency medical technician-basic, phlebotomy technician, and pharmacy technician. D.9.I

10 **) The student evaluates ethical behavioral standards and legal responsibilities of a health science professional. The student is expected to:** D.10

- A research and describe the role of professional associations and regulatory agencies; D.10.A
- B examine legal and ethical behavior standards such as Patient Bill of Rights, advanced directives, and HIPAA; and D.10.B
- C investigate the legal, ethical, and professional ramifications of unacceptable or discriminatory behavior. D.10.C

11 **) The student exhibits the leadership skills necessary to function in a healthcare setting. The student is expected to:** D.11

- A identify essential leadership skills of health science professionals; D.11.A
- B assess group dynamics in real or simulated groups; and D.11.B
- C integrate consensus-building techniques. D.11.C

12 **) The student maintains a safe work environment. The student is expected to:** D.12

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A describe governmental regulations and guidelines from entities such as the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), U.S. Food and Drug Administration (FDA), The Joint Commission, and the National Institute of Health (NIH), and Texas Department of State Health Services (DSHS); D.12.A

B explain protocols related to hazardous materials and situations such as personal protective equipment (PPE) and blood borne pathogen exposure; D.12.B

C describe how to assess and report unsafe conditions; D.12.C

D identify the benefits of recycling and waste management for cost containment and environmental protection; and D.12.D

E demonstrate proper body mechanics to reduce the risk of injury. D.12.E

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13) The student assesses wellness strategies for the prevention of disease. The student is expected to: D.13

A research wellness strategies for the prevention of disease; D.13.A

B evaluate positive and negative effects of relationships on physical and emotional health; D.13.B

C explain the benefits of positive relationships between community members and health professionals in promoting a healthy community; D.13.C

D research and analyze the effects of access to quality health care; D.13.D

E research alternative health practices and therapies; and D.13.E

F explain the changes in structure and function of the body due to trauma and disease. D.13.F