

Health Science Theory (2021)

Implementation. The provisions of this section shall be implemented by school districts beginning with the 20242025 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 material **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 20242025 school y **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 **A.3**

General requirements. This course is recommended for students in Grades 1012. Prerequisites: one credit in biology and at least one credit in a course from the health science **C B**

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Introduction. **C**

- 1** Career and technical education instruction provides content aligned with challenging academic standards, industryrelevant technical knowledge, and college and career readiness **C.1**
- 2** The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology **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 fa **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 shoul **C.4**

5 The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function indiv 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 r 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

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 patientcentered 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 healthcarerelated 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, nonverbal, 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 nonverbal 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

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 decisionmaking 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

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 pharmacist; 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 consensusbuilding techniques. D.11.C

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

- A describe governmental regulations and guidelines from entities such as the World Health Organization WHO, Centers for Disease Control and Prevention CDC, Occupational Safety 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

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