Health Science Theory (Proc 24)

PRE-TEST/POST-TEST TEKS BLUEPRINT

Pre-Test/Post-Test Development Overview

TEKS Addressed Selection Process

The Texas Essential Knowledge & Skills (TEKS) included in the course pre-test and post-test were selected for their direct relevance to the course content. This selection process was guided by the goal of assessing learners' understanding of specific topics and skills that are integral to the course. As a result, TEKS related to general employability skills or broader topics were often excluded. This focus ensures that the assessments accurately measure students' mastery of the subject matter, allowing educators to gain a clear insight into areas where students excel or may need additional support. By concentrating on content-specific TEKS, the tests provide a more precise evaluation of the students' knowledge and understanding of the core material.

Test Question Development Process

The questions created for the pre-test and post-test were designed using psychometric principles to ensure they are of high quality and fairness. This approach helps to accurately assess student understanding. These principles guide the development of questions to be reliable, valid, and free from bias, ensuring that they effectively measure the knowledge and skills the students are expected to acquire in the course.

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Knowledge & Skills Statement	Student Expectation	iCEV Lesson Title
(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 -	(B) communicate medical information accurately and efficiently in language that patients can understand; and	Employability Skills in Healthcare
(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 -	(C) comply with Health Insurance Portability and Accountability Act (HIPAA) policy standards.	Employability Skills in Healthcare
(3) The student applies mathematics, science, English language arts, and social studies in health science. The student is expected to -	(A) solve mathematical calculations appropriate to situations in a healthcare-related environment;	Mathematics in Health Science
(3) The student applies mathematics, science, English language arts, and social studies in health science. The student is expected to -	(B) express ideas clearly in writing and develop skills in documentation related to health science;	Mathematics in Health Science
(3) The student applies mathematics, science, English language arts, and social studies in health science. The student is expected to -	(C) interpret complex technical material related to the health science industry;	Employability Skills in Healthcare
(3) The student applies mathematics, science, English language arts, and social studies in health science. The student is expected to -	(D) summarize biological and chemical processes in the body such as maintaining homeostasis; and	Homeostasis
(3) The student applies mathematics, science, English language arts, and social studies in health science. The student is expected to -	(E) research topics related to health science such as the global impact of disease prevention.	Community and World Health
(4) The student demonstrates verbal, non-verbal, and electronic communication skills. The student is expected to -	(A) demonstrate therapeutic communication appropriate to the situation;	Skills for Health Science Professionals: Communication
(4) The student demonstrates verbal, non-verbal, and electronic communication skills. The student is expected to -	(B) use appropriate verbal and non-verbal skills when communicating with persons with sensory loss and language barriers in a simulated setting; and	Skills for Health Science Professionals: Communication
(4) The student demonstrates verbal, non-verbal, and electronic communication skills. The student is expected to -	(C) use electronic communication devices in the classroom or clinical setting appropriately.	Skills for Health Science Professionals: Communication
(5) The student analyzes and evaluates communication skills for maintaining healthy relationships in the healthcare workplace. The student is expected to -	(A) evaluate how healthy relationships influence career performance;	Healthy Relationships
(5) The student analyzes and evaluates communication skills for maintaining healthy relationships in the healthcare workplace. The student is expected to -	(B) identify the role of communication skills in building and maintaining healthy relationships;	Healthy Relationships
(5) The student analyzes and evaluates communication skills for maintaining healthy relationships in the healthcare workplace. The student is expected to -	(C) demonstrate strategies for communicating needs, wants, and emotions in a healthcare setting; and	Healthy Relationships
(5) The student analyzes and evaluates communication skills for maintaining healthy relationships in the healthcare workplace. The student is expected to -	(D) evaluate the effectiveness of conflict-resolution techniques in various simulated healthcare workplace situations.	Healthy Relationships
(6) The student documents and records medical information into a permanent health record. The student is expected to -	(A) research document formats such as dental or medical records;	Medical Records
(6) The student documents and records medical information into a permanent health record. The student is expected to -	(B) prepare health documents or records according to industry-based standards; and	Medical Records
(6) The student documents and records medical information into a permanent health record. The student is expected to -	(C) record health information on paper and electronic formats such as patient history, vital statistics, and test results.	Medical Records
(8) The student identifies problems and participates in the decision-making process. The student is expected to -	(B) evaluate the impact of decisions in health science; and	Scientific Reasoning and Problem Solving
(8) The student identifies problems and participates in the decision-making process. The student is expected to -	(C) suggest modifications to a decision or plan based on healthcare outcomes.	Scientific Reasoning and Problem Solving

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Knowledge & Skills Statement	Student Expectation	iCEV Lesson Title
(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 -	(A) comply with specific industry standards related to safety requirements;	The Healthcare Industry - Safe Working Environments
(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 -	(B) employ medical vocabulary specific to the healthcare setting;	Medical Terms and Terminology
(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 -	(C) perform admission, discharge, and transfer functions in a simulated setting;	Skills for Health Science Professionals: Admissions, Transfer & Discharge
(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) demonstrate skills related to assisting patients with activities of daily living such as dressing, undressing, grooming, bathing, and feeding;	Skills for Health Science Professionals: Activities for Daily Living
(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 -	(E) determine proper equipment needed for patient ambulation such as gait belts, wheelchairs, crutches, or walkers;	Skills for Health Science Professionals: Ambulation & Positioning
(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 -	F) demonstrate skills related to assessing range of motion and assisting with mobility, including positioning, turning, lifting, and transferring patients for treatment or examination;	Skills for Health Science Professionals: Ambulation & Positioning
(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 -	(G) role play techniques used in stressful situations such as situations involving trauma and chronic and terminal illness;	Skills for Health Science Professionals: Communication
(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 -	(H) demonstrate first aid, vital signs, cardiopulmonary resuscitation, and automated external defibrillator skills; and	Skills for Health Science Professionals: CPR & AED Skills for Health Science Professionals: First Aid Skills for Health Science Professionals: Vital Signs
(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 -	(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.	Skills for Health Science Professionals: Activities for Daily Living Skills for Health Science Professionals: Ambulation & Positioning
(10) The student evaluates ethical behavioral standards and legal responsibilities of a health science professional. The student is expected to -	(A) research and describe the role of professional associations and regulatory agencies;	The Healthcare Industry - Ethics and Liability
(10) The student evaluates ethical behavioral standards and legal responsibilities of a health science professional. The student is expected to -	(B) examine legal and ethical behavior standards such as Patient Bill of Rights, advanced directives, and HIPAA; and	The Healthcare Industry - Ethics and Liability
(10) The student evaluates ethical behavioral standards and legal responsibilities of a health science professional. The student is expected to -	(C) investigate the legal, ethical, and professional ramifications of unacceptable or discriminatory behavior.	Health Science Safety and Regulations
(11) The student exhibits the leadership skills necessary to function in a healthcare setting. The student is expected to -	(A) identify essential leadership skills of health science professionals;	The Healthcare Industry - Collaboration and Cooperation
(11) The student exhibits the leadership skills necessary to function in a healthcare setting. The student is expected to -	(B) assess group dynamics in real or simulated groups; and	The Healthcare Industry - Collaboration and Cooperation
(11) The student exhibits the leadership skills necessary to function in a healthcare setting. The student is expected to -	(C) integrate consensus-building techniques.	The Healthcare Industry - Collaboration and Cooperation
(12) The student maintains a safe work environment. The student is expected to -	(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);	The Healthcare Industry - Safe Working Environments
(12) The student maintains a safe work environment. The student is expected to -	(B) explain protocols related to hazardous materials and situations such as personal protective equipment (PPE) and blood borne pathogen exposure;	The Healthcare Industry - Safe Working Environments

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(12) The student maintains a safe work environment. The student is expected to -	(C) describe how to assess and report unsafe conditions;	The Healthcare Industry - Safe Working Environments
(12) The student maintains a safe work environment. The student is expected to -	(D) identify the benefits of recycling and waste management for cost containment and environmental protection; and	Health Science Safety and Regulations
(12) The student maintains a safe work environment. The student is expected to -	(E) demonstrate proper body mechanics to reduce the risk of injury.	Principles of Body Mechanics
(13) The student assesses wellness strategies for the prevention of disease. The student is expected to -	(A) research wellness strategies for the prevention of disease;	Disease Prevention = Health Promotion
(13) The student assesses wellness strategies for the prevention of disease. The student is expected to -	(B) evaluate positive and negative effects of relationships on physical and emotional health;	Healthy Relationships
(13) The student assesses wellness strategies for the prevention of disease. The student is expected to -	(C) explain the benefits of positive relationships between community members and health professionals in promoting a healthy community;	The Healthcare Industry - Collaboration and Cooperation
(13) The student assesses wellness strategies for the prevention of disease. The student is expected to -	(D) research and analyze the effects of access to quality health care;	The Healthcare Industry - Importance of the Healthcare System
(13) The student assesses wellness strategies for the prevention of disease. The student is expected to -	(E) research alternative health practices and therapies; and	Complementary and Alternative Health Practices
(13) The student assesses wellness strategies for the prevention of disease. The student is expected to -	(F) explain the changes in structure and function of the body due to trauma and disease.	Body Systems - Diseases, Trauma and Congenital Defects