

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
Health Science Pathways and Careers		
Studying Health Science		
		Differentiate between health science and health care.
		Explain fields of study that are important to health science.
		Describe techniques for studying health science information.
Evolution of the Health Science Industry		
		Describe the major developments of healthcare history from ancient times until the present day.
		Compare and contrast modern medical practice with ancient ideas related to health.
		Describe the recent evolution of the healthcare industry.
Diagnostic Pathways and Careers		
		Describe the characteristics of a diagnostic health science career.
		Identify the responsibilities of various diagnostic health science careers.
		Identify specialized trainings and certifications common in diagnostic careers.
Therapeutic Pathways and Careers		
		Describe the characteristics of a therapeutic health science career.
		Identify the responsibilities of various therapeutic health science careers.
		Identify specialized trainings and certifications common in therapeutic careers.
Health Informatics Pathways and Careers		
		Describe the characteristics of a health informatics health science career.
		Identify the responsibilities of various health informatics health science careers.

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Identify specialized trainings and certifications common in health informatics careers.
	Support Services Pathways and Careers	
		Describe the characteristics of a support services health science career.
		Identify the responsibilities of various support services health science careers.
		Identify specialized trainings and certifications common in biotechnology development and research careers.
	Biotechnology Development and Research Pathways and Careers	
		Describe the characteristics of biotechnology research and development health science careers.
		Identify the responsibilities of various biotechnology research and development health science careers.
		Identify specialized trainings and certifications common in biotechnology research and development careers.
	Trends and the Future of Health Science	
		Describe the ways technology has influenced health care.
		Explain the impact of technology on healthcare delivery.
		Analyze current trends in the drive to improve health care and healthcare delivery.
		Describe the job outlook for health science careers.
	Unit Test	
	Pursuing Health Science Careers	
	Career Self-Assessment	
		Analyze personal goals and career interests.
		Identify ways to find information about health science careers.
	Certification	
		Explain the role and importance of certifications and licensure in the healthcare profession.

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Identify the government and professional organizations which regulate the credentialing and licensure process.
		Discuss laws which mandate certification requirements for employment in the healthcare industry.
	Planning for Career Requirements	
		Identify the credentialing processes necessary for healthcare careers, including certification, licensure, and registration.
		Explain the process for acquiring necessary certification, licensure, and registration for a health science career.
	Career Portfolio and Resume	
		Identify documentation necessary for a job search, including career portfolios and résumés.
		Identify the components and characteristics of a professional résumé.
		Identify the components and characteristics of a cover letter.
		Describe the purpose of references and work samples.
	Job Hunting	
		Interpret job advertisements.
		Identify ways to find out about job opportunities.
		Explain the importance of self representation skills in career fields.
		Identify personal traits or attitudes desirable in a member of the healthcare team.
	Professionalism in Health Care	
		Identify personal qualities that contribute to professionalism.
		Describe strategies for managing time and tasks.
		Describe strategies for managing resources.
	Professional Development	
		Explain how to retain and advance employment in a rapidly changing workplace.
		Explain the importance of ongoing professional development in the healthcare industry.

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Identify methods of attaining ongoing training in the healthcare industry.
	Career Options	
		Recognize the impact of career decisions.
		Examine entrepreneurship as a career planning option.
		Explain the steps necessary to become an entrepreneur in the health science industry.
	Unit Test	
Ethics and the Law		
	Ethics	
		Define the concepts of ethics and integrity and explain how they are related.
		Describe personal, professional, and organizational ethics.
		Examine current ethical issues related to the healthcare industry.
		Explain how and why regulations are needed to promote ethical behavior in the health science industry.
		Explain the purpose of Professional Standards of Care.
	Patient Bill of Rights	
		Explain how federal legislation and activity has defined, codified, and protected the rights of patients.
		Explain the concepts of the Patient's Bill of Rights.
		Explain the importance of the Patient's Bill of Rights.
	Medical Ethics and Advance Directives	
		Explain the relationship between the concept of autonomy and the doctrine of informed consent.
		Explain the conflict between beneficence and autonomy.
		Explain the importance of legal contracts in healthcare delivery, especially in regards to advance directives.
	Confidentiality	

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Define privacy and privileged communication.
		Define confidentiality.
		Explain the importance of confidentiality in health care.
		Explain how the Health Insurance Portability and Accountability Act (HIPAA) helps protect patient confidentiality.
	Workplace Liability and Malpractice	
		Explain practices that could result in malpractice, liability and/or negligence.
		Recognize the limits of authority and responsibility of healthcare workers.
		Explain the responsibilities of healthcare workers to report illegal or unethical healthcare practices.
		Examine the effect of liability on employers and employees in the health science industry.
	Risk Management	
		Explain the role of risk management in healthcare.
		Explain the importance of incident reporting protocols and investigations.
		Describe the relationship between incident reporting and quality improvements.
	Recognizing and Reporting Abuse	
		Identify the signs that indicate possible abuse or neglect.
		Describe the responsibilities health science workers in reporting domestic violence.
		Explain the responsibilities health science workers have in responding to suspected domestic violence.
	Unit Test	
Healthcare Systems		
	Healthcare System Components	
		Explain systems theory.
		Explain the components of a healthcare system.

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Describe the interdependence of healthcare professions and systems within the healthcare system.
	Healthcare Facilities	Identify common types of healthcare facilities.
		Differentiate between for-profit, non-profit, and government run healthcare facilities.
	Health Insurance	Define health insurance.
		Identify various health insurance plan components.
		Identify and differentiate between common types of health insurance plans.
	Health Care and Society	Examine labor issues related to an health science industry.
		Examine community and social issues related to an health science industry.
		Analyze the role of the healthcare industry in public health issues.
		Explain how the practice of lobbying affects the healthcare industry.
	Health Care as a Business	Describe the impact of business on healthcare environments.
		Describe the role of management within a health science industry.
		Describe the role of financial responsibility within the health science industry.
		Describe the role of planning within the health science industry.
	Healthcare Trends	Analyze current trends in healthcare delivery systems.
		Examine the impact of the Internet on the healthcare industry and on the individual consumer.
		Explain how healthcare services impact the economy.

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
	Responsibility and Quality Control in Health Care	
		Explain the rationale for having quality control systems in the healthcare industry.
		List and describe quality control systems and practices common in the healthcare industry.
		Examine health, safety, and environmental issues related to an health science industry.
	Unit Test	
Health and Wellness		
	Wellness	
		Identify the fundamentals of wellness.
		Describe how healthy and unhealthy behaviors affect wellness.
		Differentiate between controllable and uncontrollable risk factors.
		Describe the importance of prevention.
	Cognitive and Emotional Development	
		Describe common cognitive changes that occur from birth to adulthood.
		Describe common emotional changes that occur from birth to adulthood.
		Explain Maslow's hierarchy of human needs.
		Identify the effects of relationships on health and wellness.
	Wellness and Life Changes	
		Describe the effects of aging on physical health and wellness.
		Examine various concepts of dealing with dying, death, and grief.
	Disease Prevention and Wellness	
		Identify fundamentals disease prevention strategies.

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Describe the elements of a wellness and stress control plan that can be used in personal and professional life.
	Diet and Wellness	
		Identify the nutrients necessary for good achieving health and wellness.
		Describe dietary guidelines and explain basic dietary management.
		Explain how the body achieves nutrition through the digestion and metabolism of food.
	Articulations and Body Movement	
		Define articulations
		Analyze the way connective tissue attaches muscle to bone and cartilage in the body
		Explain how the musculoskeletal system allows the human body to move
	Homeostasis	
		Define homeostasis
		Analyze ways in which the internal human body maintains homeostasis
		Explain the importance of homeostasis in the human body
	Diversity in Health Care	
		Define holistic care.
		Explain the importance of understanding cultural diversity in health care.
		Describe the relationship between culture, ethnicity, and race.
		Identify various factors that interfere with the acceptance of cultural diversity.
	Diverse Health Care Beliefs and Practices	
		Identify and evaluate cultural and religious differences in healthcare delivery concepts, methods, and techniques.
		Identify diverse beliefs and describe how they influence healthcare.
		Compare and contrast various complementary and alternative health practices.

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Identify various factors that interfere with the acceptance of cultural diversity.
	Unit Test	
	Cumulative Exam	
	Cumulative Exam Review	
	Cumulative Exam	
	Safety in the Workplace	
	Healthcare Laws and Regulations	
		Differentiate between federal and state laws and regulations governing health care
		Identify the government institutions that affect the healthcare industry
		Identify professional agencies and organizations in the healthcare field and their roles
	Healthcare Safety Regulatory Agencies	
		Identify various governing regulatory agencies
		Explain the role of each of the governing regulatory agencies on the practice of health care
		Explain the scope of the Centers for Disease Control and Prevention (CDC) and the Occupational Safety and Health Administration (OSHA)
		Discuss the Joint Commission on Accreditation of Health Organization's role in setting safety standards for patients
	Hazards in Health Care	
		Identify common hazards and hazardous materials found in healthcare settings
		Describe safety procedures and how they serve to keep healthcare environments safe
		Describe the Occupational Safety and Health Association (OSHA) and Centers for Disease Control (CDC) policies and procedures for handling and disposing of infectious and hazardous materials
	Safety Policies and Procedures	
		Define and differentiate between policies, procedures, and protocols

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Explain the importance of complying with institutional policies and procedures in order to maintain a safe and clean work environment
		Justify the rationale behind protocols and safety procedures
		Identify common safety practices in all aspects of the health science industry
	Maintaining a Safe Work Environment	
		Explain the importance of a safe work environment
		Identify safety precautions and practices that can help maintain safety in healthcare environments
		Identify and practice security procedures for medical supplies and equipment
		Recognize Materials Safety Data Sheets (MSDS) and comply with safety signs, symbols and labels
		Analyze the role and the responsibilities of the healthcare provider (student) in the classroom, laboratory, and various workplace settings in an emergency situation
	Disaster Planning	
		Identify the components of disaster planning
		Identify items found in a basic emergency kit
		Explain proper disaster preparedness procedures for a variety of emergency situations
	Managing Emergency Scenarios	
		Identify the four stages of emergency management
		Describe principles of emergency management
		Explain the components of fire safety and dealing with fires
	Reducing Medical Errors	
		Explain the importance of reducing and preventing medical errors in various healthcare settings
		Identify methods to reduce medical errors in the various healthcare settings
		Describe methods to prevent medical errors in the various healthcare settings

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
	Unit Test	
First Aid		
	Infection Control and Asepsis	
		Explain the principles of infection control and asepsis
		Evaluate the need for asepsis in the healthcare environment
		Differentiate between cleaning, disinfecting, and sterilizing
		Explain the steps and purpose of medical aseptic techniques
	Chain of Infection	
		Explain the chain of transmission of infection
		Identify common hospital-acquired infections
		Explain how to destroy or control the spread of infections
		Describe the purpose for and identify various types of isolation techniques
	First Aid and Emergency Response	
		Describe legal parameters relating to the administration of emergency care.
		Identify basic life-support techniques.
		Identify basic life-support equipment.
		Identify personal protective equipment.
		Explain how the use of personal protective equipment can help a first responder apply life-support techniques safely.
	Blood-Borne Diseases	
		Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood-borne pathogens by identifying "at-risk" behaviors
		Demonstrate knowledge of the legal aspects of AIDS, including testing

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Explain the infection control techniques that can help prevent the spread of diseases caused by blood-borne pathogens
		Identify community resources and services available to the individuals with diseases caused by blood-borne pathogens
	Emergency Care: Falls and Poisoning	
		Describe the causes, symptoms, and treatments of medical emergencies related to falls
		Describe the causes, symptoms, and treatments of medical emergencies related to poison and adverse drug reactions
		Explain how to respond to falls and poisoning cases
	Emergency Care: Trauma and Shock	
		Describe the causes, symptoms, and treatments of medical emergencies related to trauma
		Describe the causes, symptoms, and treatments of medical emergencies related to shock
		Explain why burns are considered a type of trauma
	Emergency Care: Seizures and Strokes	
		Describe the causes, symptoms, and treatments of medical emergencies related to seizures
		Describe the causes, symptoms, and treatments of medical emergencies related to strokes.
		Explain how to respond to seizures and strokes
	Incident Recordkeeping in Health Care	
		Describe recordkeeping activities in health care
		Explain how recordkeeping activities can help prevent and reduce incidents in the workplace
	Unit Test	
Communication, Leadership, and Teamwork		

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
	Communication Fundamentals	
		Define communication, and analyze the process of communication
		Distinguish between effective and ineffective communication
		Define and differentiate between verbal and non-verbal communication
		Explain the appropriate response to verbal and non-verbal cues
	Diverse Communication Practices	
		Identify effective communications skills necessary for responding to the needs of individuals in a diverse society
		Explain how to adapt communication skills for a diverse audience
		Identify the consequences of poor communication
	Overcoming Communication Barriers	
		Identify the types of barriers which may interfere with effective communication
		Identify effective methods of communicating with patients who have physical, behavioral, or emotional impairments
		Explain how communication barriers can affect the patient's ability and motivation to communicate
		Explain how communication barriers can be overcome
	Leadership in Health Science	
		Define "leadership."
		Describe the skills and responsibilities of a leader.
		Explain how leaders who use mentoring can impact teams.
		Explain the importance of delegation.
		Compare leadership styles.
	Healthcare Teams	
		Explain basic concepts of teamwork, and analyze different types of teams.

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Describe common consensus-building techniques and how to use them.
		Explain the necessity of teamwork in providing quality healthcare services.
		Identify the common roles and responsibilities of healthcare team members.
		Identify the collaborative role of team members between systems to deliver quality health care.
	Conflict Resolution	
		Define conflict resolution
		Identify effective techniques for resolving conflict
		Employ critical thinking and interpersonal skills to resolve conflicts
	Meetings	
		Explain how meetings can be effective tools to accomplish goals
		Demonstrate the ability to effectively participate in meetings
		Demonstrate the ability to effectively conduct meetings
	Student Organizations	
		Identify the purposes and goals of a student organization
		Explain how student organizations help foster leadership
		Explain the purpose of Career and Technical Student Organizations.
		Identify the benefits of belonging to Health Occupations Students of America (HOSA)
	Unit Test	
Health Science Career Skills		
	Listening and Speaking	
		Identify effective speaking and listening skills.
		Organize and develop ideas into accurate verbal reports.

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Plan and prepare effective oral presentations.
	Reading	
		Identify effective reading and writing skills
		Demonstrate effective reading and writing skills
		Locate, organize and reference written information from various sources
		Define plagiarism and learn how to avoid it through proper documentation skills
		Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace
	Math Skills	
		Demonstrate knowledge of common arithmetic operations in health care
		Make estimates and approximations and judge the reasonableness of the result
		Convert units between systems of measurement, including metric and traditional units, and regular time to 24-hour time
	Calculating Medication Dosages	
		Identify the main systems of measurement for medication
		Perform simple calculations related to measuring and converting doses of medication
	Science Skills	
		Distinguish between subjective and objective information
		Formulate scientifically investigable questions and construct investigations
		Collect and evaluate data, and develop scientific recommendations based on findings
		Discuss the role of creativity in constructing scientific questions, carrying out methods, and developing explanations
	Observation and Reporting Skills	
		Identify the characteristics of good observational and reporting skills

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		Develop basic observational skills and related documentation strategies in written and oral form
		Report relevant information in order of occurrence
	Reasoning Skills	
		Organize and communicate the results obtained by observation and experimentation
		Demonstrate ability to evaluate and draw conclusions
		Explain the theory of root-cause analysis as used in health science
	Using Data with Tables, Charts, and Graphs	
		Define tables, charts and graphs
		Create tables, charts and graphs from data
		Interpret tables, charts and graphs from data
		Apply data from tables, charts and graphs to provide solutions to health-related problems
	Unit Test	
Technology in Health Science		
	Using Technology in Health Care	
		Describe the uses of computers in health care
		Define terms and demonstrate basic computer skills
		Use personal information management (PIM) applications to increase workplace efficiency
		Employ collaborative/groupware applications to facilitate group work
	Information Technology	
		Define information technology and informatics
		Explain necessary information technology skills
		Identify healthcare technology equipment used in diagnostic, therapeutic, health informatics, support services, and

TX-Principles of Health Science		Scope and Sequence
Unit	Lesson	Objectives
		biotechnology research and development systems, and relate findings to identified societal risk factors
	Technical Skills	
		Interpret technical information related to the health science industry
		Identify the technical skills required of workers in the health and medical science industry
		Examine principles of technology that underlie the health and medical science industry
	Using Medical Equipment	
		Identify various types of medical equipment
		Demonstrate the safe use of medical equipment
		Explain radiographic safety
		Explain and summarize the process for reporting equipment or technology malfunctions
	Biotechnology	
		Define biotechnology, and explain biotechnological concepts
		Describe the impact of biotechnology on preventive health care
		Describe the role biotechnology plays in medical forensics used in criminal investigations
		Discuss the ethics of biotechnology and other technological advances
	Laboratory Procedure	
		Explain how to assess lab findings using automated equipment and computerized instruments, microscopes, cell counters, and/or other sophisticated laboratory equipment
		Explain how to document results of laboratory findings
		Explain how to relay lab results to physicians
	Unit Test	
	Cumulative Exam	
	Cumulative Exam Review	

Unit Lesson**Objectives**

Cumulative Exam