

Unit	Lesson	Lesson Objectives
Workplace Readiness Skills-Technology Knowledge and Skills		
Technology Basics		
Identify the skills needed to work in a technological environment.		
Summarize how technology is transforming the workplace.		
Computer Technology and Applications		
Describe business uses of the Internet.		
Describe copyright and other laws that affect how we use technology.		
Name types of computer programs commonly used in business and explain their uses.		
Using Your Time Effectively		
Create a schedule that will help you accomplish tasks on time.		
Explain how to prioritize your work.		
Identify strategies for managing your time effectively.		
Health Science Pathways and Careers		
Studying Health Science		
Describe techniques for studying health science information.		
Differentiate between health science and health care.		
Explain fields of study that are important to health science.		
Evolution of the Health Science Industry		
Compare and contrast modern medical practice with ancient ideas related to health.		
Describe the major developments of healthcare history from ancient times until the present day.		
Describe the recent evolution of the healthcare industry.		
Diagnostic Pathways and Careers		
Describe the characteristics of a diagnostic health science career.		
Identify specialized trainings and certifications common in diagnostic careers.		
Identify the responsibilities of various diagnostic health science careers.		
Therapeutic Pathways and Careers		
Describe the characteristics of a therapeutic health science career.		
Identify specialized trainings and certifications common in therapeutic careers.		
Identify the responsibilities of various therapeutic health science careers.		
Health Informatics Pathways and Careers		
Describe the characteristics of a health informatics health science career.		
Identify specialized trainings and certifications common in health informatics careers.		
Identify the responsibilities of various health informatics health science careers.		

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Support Services Pathways and Careers

- Describe the characteristics of a support services health science career.
- Identify specialized trainings and certifications common in biotechnology development and research careers.
- Identify the responsibilities of various support services health science careers.

Biotechnology Development and Research Pathways and Careers

- Describe the characteristics of biotechnology research and development health science careers.
- Identify specialized trainings and certifications common in biotechnology research and development careers.
- Identify the responsibilities of various biotechnology research and development health science careers.

Pursuing Health Science Careers

Career Self-Assessment

- Analyze personal goals and career interests.
- Identify ways to find information about health science careers.

Certification

- Discuss laws which mandate certification requirements for employment in the healthcare industry.
- Explain the role and importance of certifications and licensure in the healthcare profession.
- Identify the government and professional organizations which regulate the credentialing and licensure process.

Planning for Career Requirements

- Explain the process for acquiring necessary certification, licensure, and registration for a health science career.
- Identify the credentialing processes necessary for healthcare careers, including certification, licensure, and registration.

Career Portfolio and Resume

- Describe the role of references and work samples.
- Identify documentation necessary for a job search, including career portfolios and resumes.
- Identify the components and traits of a cover letter.
- Identify the components and traits of a professional résumé.

Job Hunting

- Explain the importance of self representation skills in career fields.
- Identify personal traits or attitudes desirable in a member of the healthcare team.
- Identify ways to find out about job opportunities.
- Interpret job advertisements.

Professionalism

- Identify personal qualities that contribute to professionalism.
- Describe strategies for managing resources.
- Describe strategies for managing time and tasks.

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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.
- Identify methods of attaining ongoing training in the healthcare industry.

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 conflict between beneficence and autonomy.
- Explain the importance of legal contracts in healthcare delivery, especially in regards to advance directives.
- Explain the relationship between the concept of autonomy and the doctrine of informed consent.

Confidentiality

- Define confidentiality.
- Define privacy and privileged communication.
- Explain how the Health Insurance Portability and Accountability Act (HIPAA) helps protect patient confidentiality.
- Explain the importance of confidentiality in health care.

Workplace Liability and Malpractice

- Examine the effect of liability on employers and employees in the health science industry.
- Explain practices that could result in malpractice, liability and/or negligence.
- Explain the responsibilities of healthcare workers to report illegal or unethical healthcare practices.
- Recognize the limits of authority and responsibility of healthcare workers.

Healthcare Systems

Healthcare Facilities

- Differentiate between for-profit, non-profit, and government run healthcare facilities.
- Identify common types of healthcare facilities.

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		<p>Health Insurance</p> <ul style="list-style-type: none"> Define health insurance. Identify and differentiate between common types of health insurance plans. Identify various health insurance plan components. <p>Health Care and Society</p> <ul style="list-style-type: none"> Analyze the role of the healthcare industry in public health issues. Examine community and social issues related to a health science industry. Examine labor issues related to a health science industry. Explain how the practice of lobbying affects the healthcare industry. <p>Health Care as a Business</p> <ul style="list-style-type: none"> Describe the impact of business on healthcare environments. Describe the role of financial responsibility within the health science industry. Describe the role of management within a health science industry. Describe the role of planning within the health science industry. <p>Healthcare Providers and Consumers</p> <ul style="list-style-type: none"> Describe the role of professionals in a variety of healthcare delivery systems. Differentiate among the types of medical care delivery systems. Identify services provided in a variety of healthcare delivery systems. Identify the roles and responsibilities of the consumer within the healthcare system. <p>Healthcare Trends</p> <ul style="list-style-type: none"> 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.
		<p>Patient Care</p> <p>Patient Care Approaches</p> <ul style="list-style-type: none"> Describe ways to provide patient care that is respectful of ethnic, religious, cultural, and personal preferences. Explain why it is important for healthcare professionals to be aware of diverse characteristics in patients. <p>Patient Communication</p> <ul style="list-style-type: none"> Describe ways in which public relations skills and effective communication with patients can provide customer satisfaction. Identify the principles of communication used in establishing relationships between healthcare workers and patients. <p>Patient Education</p> <ul style="list-style-type: none"> Describe methods of explaining technical information at levels accessible to a variety of patients. Explain the importance of patient/client education in health care. Identify the common types of information that a patient or client may be interested in.

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Handling Client Information

- Describe the legal and professional standards for accessing, reporting, and documenting client health information.
- Describe the rationale for policies and procedures for handling personal information.
- Explain the process and importance of establishing patient identification and medical history.

Medical Records

- Describe the legal implications of medical records.
- Explain the purpose of medical records.
- Identify the components of the medical record.

Body Mechanics and Ergonomics for Patients

- Explain the importance of body mechanics and ergonomics in a healthcare setting.
- Identify and analyze the principles of body mechanics and movements.
- Identify the basic medical exam positions.

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.

Diet and Wellness

- Describe dietary guidelines and explain basic dietary management.
- Explain how the body achieves nutrition through the digestion and metabolism of food.
- Identify the nutrients necessary for good achieving health and wellness.

Food Safety and Handling

- Describe food safety laws and regulations in the US.
- Describe international food safety practices.
- Identify principles of safe food handling.

Diversity in Health Care

- Define holistic care.
- Describe the relationship between culture, ethnicity, and race.
- Explain the importance of understanding cultural diversity in health care.
- Identify various factors that interfere with the acceptance of cultural diversity.

Safety in the Workplace

Hazards in Health Care

- 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
- Identify common hazards and hazardous materials found in healthcare settings

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Safety Policies and Procedures		
Define and differentiate between policies, procedures, and protocols		
Explain the importance of complying with institutional policies and procedures in order to maintain a safe and clean work environment		
Identify common safety practices in all aspects of the health science industry		
Justify the rationale behind protocols and safety procedures		
Maintaining a Safe Work Environment		
Analyze the role and the responsibilities of the healthcare provider (student) in the classroom, laboratory, and various workplace settings in an emergency situation		
Explain the importance of a safe work environment		
Identify and practice security procedures for medical supplies and equipment		
Identify safety precautions and practices that can help maintain safety in healthcare environments		
Recognize Materials Safety Data Sheets (MSDS) and comply with safety signs, symbols and labels		
Disaster Planning		
Explain proper disaster preparedness procedures for a variety of emergency situations		
Identify items found in a basic emergency kit		
Identify the components of disaster planning		
Managing Emergency Scenarios		
Describe principles of emergency management		
Explain the components of fire safety and dealing with fires		
Identify the four stages of emergency management		
First Aid		
Infection Control and Asepsis		
Differentiate between cleaning, disinfecting, and sterilizing		
Evaluate the need for asepsis in the healthcare environment		
Explain the principles of infection control and asepsis		
Explain the steps and purpose of medical aseptic techniques		
Chain of Infection		
Describe the purpose for and identify various types of isolation techniques		
Explain how to destroy or control the spread of infections		
Explain the chain of transmission of infection		
Identify common hospital-acquired infections		

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		First Aid and Emergency Response <ul style="list-style-type: none"> Describe legal parameters relating to the administration of emergency care Explain how the use of personal protective equipment can help a first responder apply life support techniques safely Identify basic life support equipment Identify basic life support techniques Identify personal protective equipment Emergency Care: Falls and Poisoning <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Describe the causes, symptoms, and treatments of medical emergencies related to shock Describe the causes, symptoms, and treatments of medical emergencies related to trauma Explain why burns are considered a type of trauma Emergency Care: Seizures and Strokes <ul style="list-style-type: none"> 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
		Communication, Leadership, and Teamwork <ul style="list-style-type: none"> Communication Fundamentals <ul style="list-style-type: none"> Define and differentiate between verbal and non-verbal communication Define communication, and analyze the process of communication Distinguish between effective and ineffective communication Explain the appropriate response to verbal and non-verbal cues Teamwork <ul style="list-style-type: none"> Explain basic concepts of teamwork, and analyze different types of teams Explain the necessity of teamwork in providing quality healthcare services Identify the collaborative role of team members between systems to deliver quality health care Identify the common roles and responsibilities of healthcare team members Conflict Resolution <ul style="list-style-type: none"> Define conflict resolution Employ critical thinking and interpersonal skills to resolve conflicts Identify effective techniques for resolving conflict

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Student Organizations		
		<p>Explain how student organizations help foster leadership</p> <p>Explain the purpose of Career and Technical Student Organizations.</p> <p>Identify the benefits of belonging to Health Occupations Students of America (HOSA)</p> <p>Identify the purposes and goals of a student organization</p>
Health Science Career Skills		
	Listening and Speaking	<p>Identify effective speaking and listening skills.</p> <p>Organize and develop ideas into accurate verbal reports.</p> <p>Plan and prepare effective oral presentations.</p>
	Reading	<p>Define plagiarism and learn how to avoid it through proper documentation skills</p> <p>Demonstrate effective reading and writing skills</p> <p>Identify effective reading and writing skills</p> <p>Locate, organize and reference written information from various sources</p> <p>Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace</p>
	Math Skills	<p>Convert units between systems of measurement, including metric and traditional units, and regular time to 24-hour time</p> <p>Demonstrate knowledge of common arithmetic operations in health care</p> <p>Make estimates and approximations and judge the reasonableness of the result</p>
	Calculating Medication Dosages	<p>Identify the main systems of measurement for medication</p> <p>Perform simple calculations related to measuring and converting doses of medication</p>
Technology in Health Science		
	Using Technology in Health Care	<p>Define terms and demonstrate basic computer skills</p> <p>Describe the uses of computers in health care</p> <p>Employ collaborative/groupware applications to facilitate group work</p> <p>Use personal information management (PIM) applications to increase workplace efficiency</p>
	Information Technology	<p>Define information technology and informatics</p> <p>Explain necessary information technology skills</p> <p>Identify healthcare technology equipment used in diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems, and relate findings to identified societal risk factors</p>

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		Use and Safety of the Internet <ul style="list-style-type: none"> Demonstrate an understanding of Internet use and security issues Demonstrate and differentiate between appropriate and inappropriate use of telecommunications technology Identify Internet safety issues and procedures for complying with acceptable use standards Technical Skills <ul style="list-style-type: none"> Examine principles of technology that underlie the health and medical science industry Identify the technical skills required of workers in the health and medical science industry Interpret technical information related to the health science industry Using Medical Equipment <ul style="list-style-type: none"> Demonstrate the safe use of medical equipment Explain and summarize the process for reporting equipment or technology malfunctions Explain radiographic safety Identify various types of medical equipment Biotechnology <ul style="list-style-type: none"> 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 Specimen Preparation and Handling <ul style="list-style-type: none"> Analyze the process for examining cells to determine quantity and/or to look for abnormal cells in blood and other body fluids and tissues Analyze the process for studying body fluids and cells for bacteria, parasites, and other microorganisms Describe specimen preparation and handling Laboratory Procedure <ul style="list-style-type: none"> 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
		Understanding Anatomy and Physiology, Part 1 <ul style="list-style-type: none"> Organization of the Body <ul style="list-style-type: none"> Analyze the basic structural organization of the body Analyze the relationship of the levels of structural organization of the body Describe the major systems of the body

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		Body Cavities <ul style="list-style-type: none">Identify body cavitiesIdentify the organs that are housed in various body cavitiesUse the proper terminology to identify body cavities
		Planes of the Body <ul style="list-style-type: none">Describe anatomical planes on the body and explain their use when studying anatomyIdentify types of planes of the bodyUse the proper terminology to identify the planes of the body
		The Chemistry of Life <ul style="list-style-type: none">Analyze the chemical processes that maintain lifeExplain the chemical composition of the human bodyIdentify the chemical elements of the body
		Cells <ul style="list-style-type: none">Analyze the function of different cell structuresAnalyze the structure of cellsDescribe cells as the building blocks of human lifeExplain how the condition of cells can be indicators of health
		Tissue <ul style="list-style-type: none">Analyze the relationship between the structure and function of cells and tissuesExplain the location and functions of each type of tissueList the four main types of tissues
		Membranes and Glands <ul style="list-style-type: none">Analyze the functions of membranes and glandsAnalyze the structure of membranes and glandsDefine membranes and glandsIdentify types of membranes and glands
Understanding Anatomy and Physiology, Part 2		
		The Integumentary System <ul style="list-style-type: none">Analyze the functions of the integumentary systemAnalyze the structure of the integumentary systemDescribe the three layers of skinExplain how the integumentary system helps achieve homeostasis

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		The Skeletal System <ul style="list-style-type: none">Analyze the functions of the skeletal systemDescribe the components of the skeletal system, including connective tissuesIdentify the major organs of the skeletal system
		The Muscular System <ul style="list-style-type: none">Analyze the structure and function of muscles in the muscular systemExplain the function of connective tissue in the muscular systemExplain the functions of the muscular systemIdentify the different muscles of the muscular systemIdentify the types of connective tissue in the muscular system
		Blood <ul style="list-style-type: none">Analyze the functions of bloodAnalyze the structure and function of blood vesselsExplain how blood circulates through the human bodyIdentify the components of blood
		The Heart <ul style="list-style-type: none">Analyze the function of the human heartAnalyze the structures of the human heartDescribe the role of the heart in circulation
		The Cardiovascular System <ul style="list-style-type: none">Analyze the functions of the cardiovascular systemAnalyze the structure of the cardiovascular system and its components, including the heart, blood, and blood vesselsExplain the important role the respiratory system plays in the cardiovascular system
		The Lymphatic System <ul style="list-style-type: none">Analyze the functions of the lymphatic systemAnalyze the structure of the lymphatic systemDefine lymph nodes and identify lymphatic organsExplain why the lymphatic system is considered part of the circulatory system
		The Immune System <ul style="list-style-type: none">Analyze the structure and functions of the immune systemDefine and describe immunizationsExplain how the lymphatic system is related to immunityIdentify the different types of immunity and immune responses

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Understanding Anatomy and Physiology, Part 3**The Respiratory System**

- Analyze the structure and functions of the respiratory system
- Define and describe ventilation
- Describe the functions of the lungs and capillaries in introducing oxygen into the human body
- Explain the relationship between the respiratory system and the circulatory system

The Digestive System

- Analyze the functions of the digestive system
- Describe the upper and lower gastrointestinal tracts
- Explain the digestive process

The Endocrine System

- Analyze life span changes that are controlled by the endocrine system
- Analyze the structure and functions of the endocrine system
- Describe the role of hormones in the endocrine system
- Identify some hormones that are secreted by organs and glands

The Reproductive System

- Analyze the structure and functions of the female reproductive system
- Analyze the structure and functions of the male reproductive system
- Define reproductive system

The Nervous System

- Analyze the structure and functions of the central nervous system
- Analyze the structure and functions of the peripheral nervous system
- Define neurons and glial cells
- Explain how the peripheral and central nervous systems function together

The Urinary System

- Analyze the structure and function of the urinary system
- Describe the role of the kidneys
- Explain urine production and analyze factors that can impact it

The Sensory System

- Analyze the functions of the sensory system in relation to the nervous system
- Define stimulus
- Identify the five human senses
- Identify the human sensory receptors

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Basic Health Care Terminology**Basic Medical Terminology**

Use anatomical terminology to describe the parts and areas of the body

Use anatomical terminology to describe the relationships between parts of the body

Basic Medical Prefixes, Suffixes, and Root Words

Analyze how common roots, prefixes, and suffixes are combined to form medical terms

Identify common roots, prefixes, and suffixes used in health science fields, including common anatomical structures

Basic Medical Abbreviations

Explain why medical terminology is often abbreviated in the healthcare industry

Identify common abbreviations for diseases and disorders

Identify common patient status abbreviations

Identify common pharmacy abbreviations