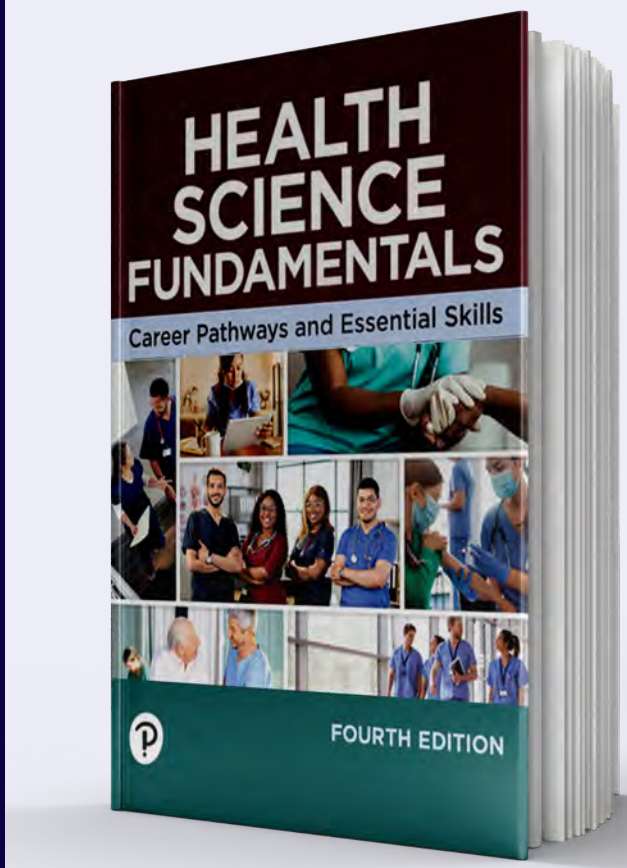
Pearson

Health Science Fundamentals, 4th Edition

By: Pearson



Prepare the next generation of healthcare professionals with real-world skills and certification alignment.

Health Science Fundamentals: Exploring Career Pathways integrates career exploration, medical knowledge, and clinical practice in one comprehensive program. From anatomy to patient care, students build critical skills supported by hands-on learning.

Key Features:

- **Career and Certification Readiness:** Supports NCHSE-aligned YouScience certifications and the Certiport Health Science Careers Certification Exam.
- **Workplace Skills:** Teaches communication, teamwork, ethics, and professionalism in healthcare settings.
- **Medical & Clinical Foundations:** Covers medical terminology, anatomy, vital signs, assisting techniques, and lab skills.
- **21st Century Learning:** Includes public health, wellness, and safety; emphasizes cultural awareness and patient-centered care.
- **Wraparound Support:** Teacher's Edition with instructional strategies, teaching notes, and differentiated instruction support.

Digital Learning with MyLab®

- Personalized instruction with adaptive learning tools
- Student performance insights and learning gap analysis
- Access to trusted content aligned to state and industry standards
- Comprehensive assessment and customization options

Table of Contents:

ISBN List

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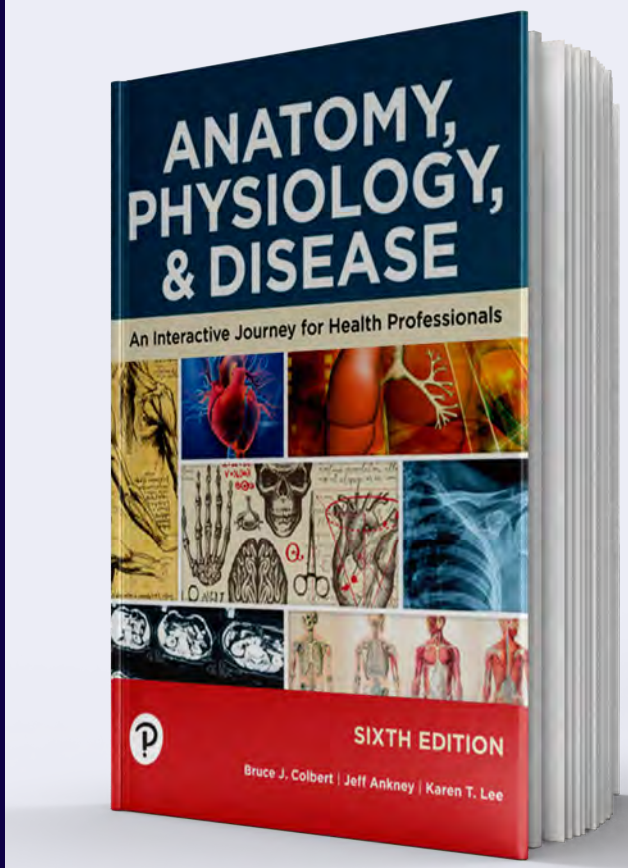
Anatomy, Physiology, & Disease, 6th Edition

By: Jeff J. Ankney & Bruce J. Colbert



An interactive, real-world approach to understanding the human body.

Anatomy, Physiology, and Disease: An Interactive Journey for Healthcare Professionals combines foundational science with clinical relevance. With case studies, pharmacology, diagnostic insights, and personalized learning tools, students explore how the human body works—and what happens when it doesn't. This program aligns to the YouScience™ Medical Anatomy & Physiology certification exam.

Key Features:

- **Integrated Learning:** Links anatomy, physiology, and pathology with real clinical applications.
- **Career Focused:** Includes professional skills, patient care practices, and "Focus on Professions" career spotlights.
- **Interactive Tools:** MyLab® supports personalized learning with dynamic study modules, auto-graded quizzes, videos, and labeling activities.
- **Engaging Design:** Two case studies follow patients through the body systems; "Pharmacology Corner" and "Pathology Connections" reinforce real-world understanding.
- **Teacher Support:** Wraparound Edition, lecture slides, TestGen, differentiated instruction resources and Spanish-language supplements including glossary and lesson objectives.

Digital Learning with MyLab®

- Personalized instruction with adaptive learning tools
- Student performance insights and learning gap analysis
- Access to trusted content aligned to state and industry standards
- Comprehensive assessment and customization options

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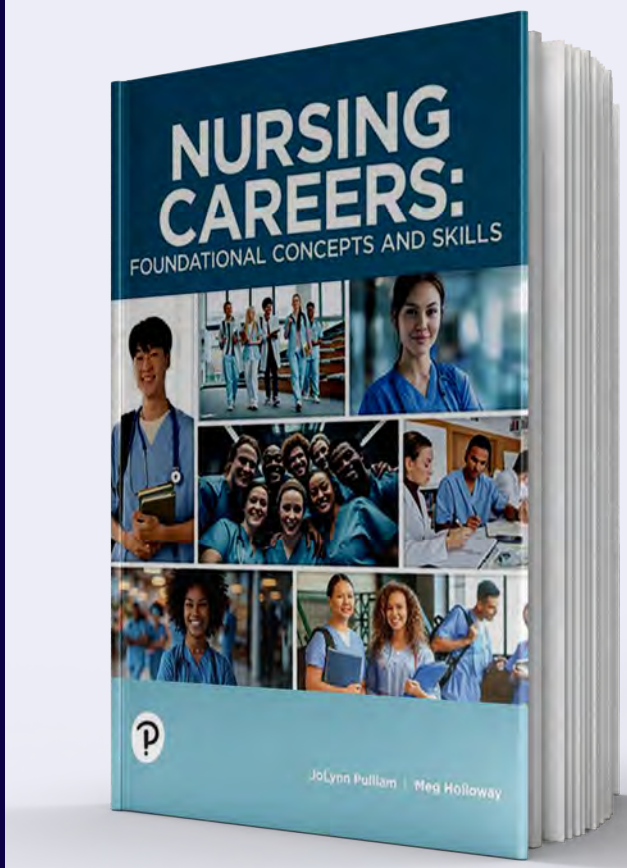
9780138045210	Student Activity Guide
9780138098797	Student Edition with Student Activity Guide
9780138045289	Teacher's Wraparound Edition

Pearson

Nursing Careers: Foundational Concepts and Skills, 1st Edition

By: JoLynn Pulliam & Meg Holloway



Hands-on skills and foundational knowledge for aspiring nursing assistants.

Nursing Careers prepares students for entry-level nursing careers with a focus on practical clinical skills, professionalism, and patient care. The course combines engaging content and rigorous instruction to build confidence, meet certification standards, and guide students through the career decision-making process.

Key Features:

- **Workplace Readiness:** Emphasizes communication, employability, patient interaction, and ethical responsibilities.
- **Skills-Based Learning:** Covers hygiene, positioning, vital signs, emergency care, nutrition, and specialty procedures.
- **Real-World Application:** Includes OBRA and Joint Commission callouts, patient safety guidelines, and long-term care skills.
- **Engaging Features:** On-page glossaries, detailed illustrations, "Stop and Jot" prompts, and chapter-based procedures.
- **Robust Support:** Teacher Wraparound Edition, Student Activity Guide, downloadable resources, and Spanish glossary.

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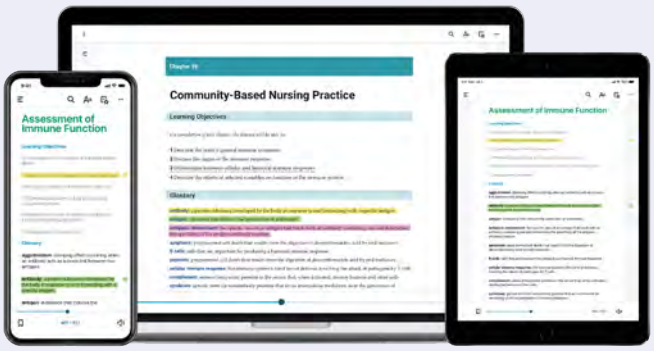

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Curriculum Scope & Sequence

Scope & Sequence – Pearson: Health Science Fundamentals, 4th edition, ©2024

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
Course Description: This textbook offers a thorough introduction to the knowledge, skills, and ethical responsibilities required for a successful career in health care. Beginning with the history of medicine and the expectations of modern health care workers, it explores the structure of health care systems, career planning, employability, and the legal and ethical standards guiding professional behavior. Students gain insight into wellness, communication, teamwork, and cultural competence, followed by essential academic foundations in medical terminology, nutrition, infection control, and the scientific process. Detailed chapters cover anatomy, physiology, human development, and mental health. Practical skills are developed through instruction in clinical procedures, patient and employee safety, vital signs, laboratory techniques, pharmacology, therapeutic and rehabilitative methods, and dental assisting. With an emphasis on professionalism, compassion, and accuracy, the textbook equips students to enter the health care field with confidence and competence.		
NOTE: This is a suggested scope and sequence for the course content.		
Total Number of Periods **Total Number of Minutes** **Total Number of Hours**	X periods 7,875 minutes 131.25 hours*	*Schedule calculations based on 175/180 calendar days. Scope and sequence allows additional time for guest speakers, student presentations, field trips, remediation, extended learning activities, etc.
Unit Number, Title, and Brief Description	**# of Class Periods*** (assumes 45-minute periods) Total minutes per unit	**Standards**
Unit 1: Introduction to Being a Health Care Worker The chapter "Introduction to Being a Health Care Worker" provides students with a foundational understanding of both the historical development of health care and the expectations placed on modern health care	120 minutes 3 periods	(1) Unit 4: Health Care Delivery Systems a. Relate the importance of lifelong learning to career success. i. Considering 21st-century emergent technology (e.g., artificial intelligence, automation, telehealth, robotics, etc.).

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professionals. The first section explores how medical knowledge has evolved over thousands of years, highlighting key scientific contributions, ethical developments, and the impact of past discoveries on current medical practices and technologies. Students learn to appreciate the progress in medicine by examining health care from primitive times through the twentieth and twenty-first centuries. The second section emphasizes the responsibilities and standards required of today's health care workers, including professional appearance, confidentiality, and emotional readiness. By understanding both the history of health care and the qualities needed in the profession, students are better prepared to pursue meaningful careers in this vital field.		ii. Develop an oral and/or written report explaining the importance of lifelong learning in maintaining career relevance and advancement. (2) Unit 6: Legal and Ethical Practices in Health Care a. Identify cultural, social, and ethnic diversity within the health care environment. i. Within a role-play situation, demonstrate respectful and empathetic treatment of all patients and clients.
Unit 2: Understanding Health Care Systems The chapter "Understanding Health Care Systems" introduces students to the broad network of organizations, services, and professionals that make up the modern health care industry. In the first section, students explore the scope and structure of health care providers, including the economic impact of health services, various outpatient	90 minutes 2 periods	(1) Unit 3: Career Preparation a. Conduct a personality test or review previous results to facilitate discussion of individualized careers individualized careers. (2) Unit 4: Health Care Delivery Systems a. Research and discuss health care delivery systems and health organizations. i. Differentiate between health care delivery systems, including nonprofit and for-profit facilities

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care options, and the importance of organizational charts and chains of command. The section also highlights the roles of government agencies, wellness initiatives, and preventive care in shaping service delivery. The second section focuses on health care systems and the challenges of rising costs, examining how reforms and innovations aim to improve access and efficiency. Students learn about managed care, cost-control strategies, and different types of insurance models, while considering how trends such as aging populations and technological advancements influence system design and delivery. This chapter provides a critical foundation for understanding how health care is organized, financed, and accessed in today's world.		1. Hospitals 2. Ambulatory/outpatient clinics 3. Long-term care 4. Home health 5. Medical and dental offices 6. Behavioral and mental health services 7. Public health ii. Identify health organizations and their respective roles. 1. Government: a. Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), U.S. Food and Drug Administration (FDA), National Institute of Health (NIH), Centers for Medicare and Medicaid Services (CMS), U.S. Public Health Service (USPHS), U.S Department of Veteran's Affairs (VA) 2. Nonprofit organizations: a. March of Dimes, American Heart Association, American Diabetes Association, American Red Cross, Alzheimer's Association, American Lung Assoc

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		3. Global: a. World Health Organization (WHO) b. Relate the importance of lifelong learning to career success. (3) Unit 6: Legal and Ethical Practices in Health Care a. Utilize procedures for reporting activities and behaviors that affect the health, safety, and the welfare of others. i. Discuss the chain of command for reporting issues.
Unit 3: Finding the Right Occupation for You The chapter "Finding the Right Occupation for You" guides students through the process of identifying and preparing for a career in the health care field. The first section, "Career Search," emphasizes the importance of understanding one's interests, values, and abilities in selecting a suitable health care occupation. Students learn how to use various resources to research career options, develop a career plan, and complete an academic roadmap aligned with their goals. The second section, "Overview of Careers," provides a broader look at the expanding health care industry, detailing how career opportunities are grouped within the Health Science career cluster. Students explore five key pathways—therapeutic, diagnostic, health informatics, support services, and biotechnology research and development—	130 minutes 3 periods	(1) Unit 3: Career Preparation a. Explore various careers in the health care field. i. Choose at least three specific careers from the list created in Unit 4.1. ii. Research the educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of each one. iii. Based on research, develop a presentation explaining the three careers and why they were chosen b. Explore the various career options in the health care field. i. Research and list various career options. 1. Emergency services 2. Respiratory care 3. Medical services 4. Nursing services 5. Laboratory services

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and examine examples of occupations in each category. Together, these sections help students make informed decisions about their future roles in the health care workforce.		6. Medical imaging 7. Health information management c. Relate the importance of lifelong learning to career success. i. Consider emergent technology (e.g., artificial intelligence, automation, telehealth, robotics, etc.). ii. Develop an oral and/or written report explaining the importance of lifelong learning in maintaining career relevance and advancement. (2) Unit 7: Communication and Teamwork a. Describe the concepts of effective communication. i. Demonstrate elements of proper written and electronic communication (e.g., spelling, grammar, and formatting).
Unit 4: Employability and Leadership The chapter "Employability and Leadership" prepares students to succeed in the workplace by focusing on essential job-seeking skills, professional behavior, and ongoing career growth. It begins with practical guidance on locating job opportunities, preparing resumes and cover letters, completing applications, and navigating the interview process. Students then explore the qualities employers value in their staff, including reliability, teamwork, and goal-setting, and learn how to maintain	140 minutes 3 periods	(1) Unit 1: Orientation and Introduction to Student a. Describe the purpose of the course and related student organizations. b. Identify student and course expectations. c. Explore the health science student organization, HOSA. i. Describe parliamentary procedures. ii. Discuss officer roles and responsibilities. d. Discuss leadership and personal development in accordance with HOSA guidelines. (2) Unit 3: Career Preparation a. Conduct practice interviews or answer a list of possible interview questions.

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employment through professional conduct. The chapter also emphasizes the benefits of joining career and technical student organizations and professional associations, such as HOSA, to develop leadership skills and remain engaged in the health care community. Finally, students learn the importance of lifelong learning through continuing education, training, and career planning, helping them adapt to industry changes and pursue advancement opportunities. This chapter equips students with the tools and mindset necessary to launch, sustain, and grow a successful career in health care.		(3) Unit 7: Communication and Teamwork a. Compare the roles and responsibilities of individual members as part of the health care team. i. Describe roles and responsibilities of team members. 1. Examples of health care teams in a hospital and clinic setting. 2. Responsibilities of team members 3. Benefits of teamwork b. Explain the principles of interacting effectively and sensitively with all members of the health care team. i. Recognize methods for building positive team relationships, including mentorships and teambuilding. ii. Analyze attributes and attitudes of an effective leader. 1. Characteristics: interpersonal skills, focused on results, positive 2. Types: autocratic, democratic, laissez-faire 3. Roles: sets vision, leads change, manages accountability
Unit 5: Understanding Your Legal Obligations The chapter "Understanding Your Legal Obligations" introduces students to the vital legal principles and responsibilities that guide	100 minutes 2 periods	(1) Unit 2: Safety in Health Care a. Identify common safety hazards. (2) Unit 6: Legal and Ethical Practices in Health Care a. Analyze legal responsibilities and implications of criminal and civil law.

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health care professionals in their daily work. Students begin by examining the Patient's Bill of Rights, learning how to respect and balance patient rights with the operational needs of health care facilities. The chapter explores the significance of licensure, certification, confidentiality, and legal documentation, highlighting how these elements contribute to high-quality and ethical care. Students also study various laws that impact health care, including those related to patient privacy and advance directives, and learn how to recognize and report illegal or unethical behavior. In the final section, the focus shifts to legal classifications, including civil and criminal law, scope of practice, and medical malpractice, with examples of common legal infractions in the medical field. This chapter equips students with a foundational understanding of legal accountability, helping them protect themselves, their patients, and their workplaces.		i. Define and discuss torts in relation to health care. 1. Malpractice 2. Negligence 3. Assault and battery 4. Invasion of privacy 5. Abuse 6. Defamation of character (libel, slander) 7. False imprisonment b. Describe and demonstrate legal practices associated with health care. i. Apply the standards for safety, privacy, and confidentiality of health information, including topics such as the Health Insurance Portability and Accountability Act and privileged communications ii. Describe advance directives, including topics such as living wills and durable power of attorney. iii. Define types of consent/contracts, including informed consent, implied contracts, and expressed contracts. iv. Research and discuss the meaning of scope of practice. c. Use with Competency 2: i. Summarize the American Hospital Association's Patient Care Partnership (for acute care, formerly

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		known as Patient's Bill of Rights) and the Resident's Bill of Rights (for long-term care). ii. Discuss scenarios and laws concerning various types of harassment/violence in the workplace d. Use with Competency 4: i. After completing each objective, facilitate a student led debate on one or multiple of the topics listed in the competency.
Unit 6: Medical Ethics The chapter "Medical Ethics" emphasizes the importance of ethical awareness and decision-making for health care professionals. In the first section, students learn how ethical behavior—distinct from legal compliance—contributes to quality patient care, respectful workplace relationships, and a strong health care team. The section introduces the health care code of ethics, explores professional responsibilities to employers and co-workers, and highlights communication practices that support patient satisfaction. The second section focuses on the responsibility of health care workers to recognize and report unethical or unsafe conduct in their work environment. Students examine expectations for respectful behavior, understand when	70 minutes 2 periods	(1) Unit 6: Legal and Ethical Practices in Health Care a. Recognize and discuss ethical boundaries within the health care environment. i. Differentiate between ethical and legal issues impacting health care. ii. Identify and explain ethical dilemmas associated with organ donation, invitro fertilization, euthanasia, stem cell research, and vaccinations. b. Identify cultural, social, and ethnic diversity within the health care environment. i. Compare religious, spiritual, and cultural—including ethnicity, race, religion, and gender—values as they impact health care.

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and how to report concerns, and identify trusted resources for support. Through this chapter, students gain a deeper understanding of how ethics guide daily actions and contribute to a culture of safety, trust, and professionalism in health care settings.		
Unit 7: Wellness The chapter "Wellness" highlights the importance of promoting physical, emotional, and cultural well-being in health care settings. In the first section, students explore holistic health, learning how the integration of mind, body, spirit, and social connection supports both personal and patient wellness. The section encourages preventive care and wellness-based approaches over purely disease-oriented treatment. The second section focuses on understanding human needs, helping students recognize the essential physiological and psychological factors that contribute to stability and healing. Topics include Maslow's hierarchy of needs, defense mechanisms, and the benefits of pet-facilitated therapy. The final section addresses the importance of cultural competence in health care, teaching students how cultural beliefs and practices	190 minutes 4 periods	(1) Unit 7: Communication and Teamwork a. Describe the concepts of effective communication.

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influence communication, behavior, and patient care. By understanding and respecting cultural differences, health care workers can build stronger relationships with patients and provide more effective and compassionate care.		
Unit 8: Teamwork The chapter "Teamwork" emphasizes the importance of effective collaboration within health care environments. As managed care systems and other providers rely increasingly on health care teams, understanding how to work well with others has become a critical skill. Students explore the structure and roles of various health care teams, learning how strong communication, cooperation, and shared responsibility contribute to cohesive and productive group dynamics. The chapter also addresses the causes of workplace conflict and equips students with practical conflict resolution strategies, highlighting how verbal and nonverbal communication can support positive interactions. These teamwork skills are essential not only in professional health care settings but in everyday life as well.	60 minutes 1 period	(1) Unit 7: Communication and Teamwork a. Compare the roles and responsibilities of individual members as part of the health care team. i. Describe roles and responsibilities of team members. ii. Recognize and demonstrate characteristics of effective teams. 1. Active participation 2. Cultural humility 3. Reliability 4. Civility 5. Flexibility 6. Trust 7. Commitment 8. Open to feedback 9. Collaboration 10. Positive attitude b. Explain the principles of interacting effectively and sensitively with all members of the health care team. DOK3 i. Apply effective techniques for managing team conflict.

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		1. Negotiation 2. Clear expectations 3. Assertive communication 4. Mediation
Unit 9: Effective Communication The chapter "Effective Communication" explores the many ways health care workers share, receive, and record information to ensure quality patient care and smooth facility operations. The first section covers interpersonal communication skills for working with people of all ages, emphasizing listening, verbal and nonverbal cues, and overcoming communication barriers. Next, students learn how to use modern communication technologies—such as phones, fax machines, email, and the Internet—to exchange essential information quickly and efficiently. The chapter also introduces the role of computers in health care, showing how they support diagnostics, record keeping, research, and ethical data management. In addition, students gain key skills in patient observation and documentation, learning how to report accurately and follow charting guidelines. The final section focuses on administrative communication tasks like scheduling, filing,	250 minutes 6 periods	(1) Unit 7: Communication and Teamwork a. Describe the concepts of effective communication. i. Interpret verbal and nonverbal communication. ii. Recognize barriers to communication, including physical disabilities (aphasia, hearing loss, impaired vision), psychological barriers (attitudes, bias, prejudice, stereotypes), language barriers. iii. Differentiate subjective and objective information. iv. Recognize the elements of communication using a sender-receiver model. v. Demonstrate speaking and active listening skills. b. Compare the roles and responsibilities of individual members as part of the health care team. i. Recognize and demonstrate characteristics of effective teams. 1. Active participation 2. Cultural humility 3. Reliability 4. Civility 5. Flexibility 6. Trust

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
and organizing medical records, all of which support care delivery and keep offices running smoothly. Altogether, this chapter prepares students to communicate effectively in both clinical and administrative health care roles.		7. Commitment 8. Open to feedback 9. Collaboration 10. Positive attitude c. Explain the principles of interacting effectively and sensitively with all members of the health care team. i. Apply effective techniques for managing team conflict. 1. Gather the facts
Unit 10: Medical Terminology The chapter "Medical Terminology" introduces students to the language used by health care professionals to communicate efficiently and accurately. In the first section, students learn the structure of medical terms by studying word elements—prefixes, roots, and suffixes—and how these elements are combined to form meaningful terms. Understanding and using this specialized vocabulary allows health care workers to document care, follow instructions, and exchange critical information clearly and professionally. The second section focuses on common medical abbreviations, which are frequently used to save time and space in written communication. Students practice recognizing, defining, and applying these	100 minutes 2 periods	(1) Unit 8: Medical Terminology and Abbreviations a. Introduce appropriate medical terminology and abbreviations as found in Appendix C. i. Use roots, prefixes, and suffixes to communicate information. ii. Use medical abbreviations to communicate information.

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abbreviations in health care settings. Mastery of medical terminology is essential for success in any health care career, making this chapter a critical step in students' professional development.		
Unit 11: Medical Math The chapter "Medical Math" equips students with essential mathematical skills used daily in health care settings. The first section reviews core math concepts such as addition, subtraction, fractions, decimals, and percentages, all of which are necessary for tasks like dosage calculations and unit conversions. In the second section, students learn the metric system, the standard measurement system in health care, and practice converting between metric and standard units for weight, height, and volume. The final section introduces the 24-hour clock, also known as military time, which is used to prevent confusion in documenting and communicating patient care times. By mastering these math skills, students can ensure accuracy, safety, and efficiency in their future health care roles.	120 minutes 3 periods	

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Unit 12: Measurement and the Scientific Process The chapter "Measurement and the Scientific Process" emphasizes the importance of scientific thinking, accurate measurement, and data analysis in the health care field. In the first section, students explore the scientific method, including its eight basic steps and the role of controlled experiments, highlighting the need for clear communication of research findings. The second section focuses on measurement tools and techniques used in clinical settings, helping students understand how to record length, weight, volume, temperature, and time with accuracy and precision. Students also learn about estimating, rounding, and how measurement errors can affect the validity of results. The final section introduces methods for organizing and interpreting data using tables, graphs, and charts—key tools for tracking patient information and presenting clinical data. Together, these skills prepare students to apply scientific reasoning and quantitative analysis in their future health care roles.	80 minutes 2 periods	

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Unit 13: Your Body and How It Functions The chapter "Your Body and How It Functions" provides students with a comprehensive overview of human anatomy and physiology, equipping future health care workers with the foundational knowledge needed to understand and support patient health. Beginning with the relationship between cells, tissues, organs, and body systems, the chapter explores each major system in detail—including the skeletal, muscular, circulatory, lymphatic, respiratory, digestive, urinary, endocrine, nervous, reproductive, and integumentary systems—explaining their structures, functions, and common disorders. Students also examine the role of genetics in health and disease, gaining insight into DNA, heredity, and inherited conditions. By learning how each system supports life and interacts with others, students develop the ability to recognize signs of illness, provide informed care, and communicate effectively with patients and the health care team. This chapter lays the groundwork for advanced medical study and clinical practice.	490 minutes 11 periods	(1) Unit 3: Career Preparation a. Explore the various career options in the health care field. i. Sports medicine ii. Nutrition and dietetics (2) Unit 9: Body Organization a. Describe the basic organization of the body. i. Identify the basic levels of organization of the human body. 1. Chemical 2. Cellular 3. Organs 4. Systems 5. Organism b. Discuss the tissue organization of the body. DOK1 i. Identify the four major categories of tissues and their respective locations, structures,and basic functions. 1. Nerve 2. Epithelium 3. Muscle (cardiac, smooth, skeletal) 4. Connective (ligaments, tendons, facia) c. Identify the body planes, directional terms, cavities, quadrants, and regions. i. Body planes: sagittal, midsagittal, coronal/frontal, transverse/horizontal

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		ii. Directional terms: superior, inferior, anterior/ventral, posterior/dorsal, medial, lateral, proximal, distal, superficial, deep, cephalic, caudal iii. Cavities: dorsal, cranial, nasal, oral, orbital, spinal, thoracic, abdominal, pelvic iv. Quadrants: upper right, lower right, upper left, lower left v. Regions: Right/left hypochondriac, right/left lumbar, right/left iliac, epigastric, umbilical, hypogastric (3) Unit 10: Integumentary System a. Discuss the structures and functions of the integumentary system. i. Identify the parts comprising the integumentary system and their respective functions. 1. Layers: epidermis, dermis, subcutaneous 2. Structures: sudoriferous glands, sebaceous glands, hair follicles, hair shaft 3. Functions: protection, sensory perception, temperature regulation (vasodilation, vasoconstriction), storage, absorption, excretion, production ii. Define and discuss pigmentation and related topics. 1. Melanin 2. Carotene 3. Albino

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		iii. Define and discuss skin discoloration and related topics: 1. Erythema 2. Jaundice 3. Cyanosis b. Explain diseases and disorders of the integumentary system and related signs, symptoms, treatment, and prevention methods. i. Identify the general signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the integumentary system. 1. Acne vulgaris 2. Athlete's foot 3. Basal cell carcinoma 4. Dermatitis 5. Eczema 6. Impetigo 7. Melanoma 8. Psoriasis 9. Ringworm 10. Squamous cell carcinoma 11. Verrucae c. Research the impact of emerging technology on the integumentary system. (4) Unit 11: Skeletal System

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		a. Compare the structures and functions of the skeletal system with its relationship to movement. i. Identify the axial and appendicular bones. ii. Identify the parts of a bone. 1. Diaphysis 2. Endosteum 3. Epiphysis 4. Medullary canal 5. Periosteum 6. Red marrow 7. Yellow marrow iii. Explain the functions of the skeletal system. 1. Framework 2. Protection 3. Levers 4. Production of blood cells 5. Storage iv. Identify the types of joints and their related movements. 1. Diarthrosis or synovial 2. Amphiarthrosis 3. Synarthrosis b. Discuss diseases and disorders of the skeletal system and related signs, symptoms, treatment, and prevention methods.

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		i. Identify the general signs, symptoms, treatment, and prevention methods associated with skeletal diseases, disorders, and injuries. 1. Bursitis 2. Osteomyelitis 3. Osteoporosis 4. Osteoarthritis 5. Rheumatoid arthritis 6. Sprain 7. Ruptured disk 8. Dislocation 9. Spinal curvatures: scoliosis, lordosis, and kyphosis 10. Fractures: stress, comminuted, compound or open, simple or closed, depressed, green stick, impacted, spiral c. Research the impact of emerging technology on the skeletal system. (5) Unit 12: Muscular System a. Compare the structures and functions of the muscular system with its relationship to movement. i. Identify the three types of muscle. 1. Cardiac 2. Visceral/smooth 3. Skeletal

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		ii. Define the characteristics of skeletal muscle. 1. Excitability 2. Contractibility 3. Extensibility 4. Elasticity iii. Demonstrate active/passive range of motion, including adduction, abduction, flexion,extension, rotation, and circumduction. b. Discuss diseases, disorders, and injury of the muscular system and related signs, symptoms, and treatment methods. i. Identify the general signs, symptoms, treatment, and prevention methods associated with muscular diseases and disorders. 1. Fibromyalgia 2. Muscle spasms 3. Muscular dystrophy 4. Myasthenia gravis 5. Strain c. Research the impact of emerging technology on the muscular system. (6) Unit 13: Cardiovascular System a. Identify and discuss the structures and functions of the cardiovascular system and their role in maintaining homeostasis.

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		i. Identify the components of blood and their respective functions. 1. Plasma 2. Erythrocytes 3. Hemoglobin 4. Leukocytes 5. Thrombocytes ii. Identify the type of blood vessels and the action of each. 1. Aorta 2. Arteries 3. Arterioles 4. Capillaries 5. Inferior vena cava 6. Pulmonary artery 7. Pulmonary veins 8. Superior vena cava 9. Veins 10. Venules iii. Identify the anatomy of the heart. 1. Layers: endocardium, myocardium, pericardium/epicardium 2. Structures: septum, right/left atriums, right/left ventricles, tricuspid

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		valve,pulmonary valve, bicuspid/mitral valve, aortic valve iv. Describe the electrical conduction pathway. 1. SA node 2. AV node 3. Bundle of HIS 4. Right and left bundle branches 5. Purkinje Fibers v. Describe the pathway of pulmonary and systemic circulation. vi. Define systole and diastole. b. Discuss diseases and disorders of the cardiovascular system and related signs, symptoms, treatment, and prevention methods. i. Identify the general signs, symptoms, treatment, and prevention methods associatedwith cardiovascular diseases and disorders. 1. Arteriosclerosis 2. Atherosclerosis 3. Congestive heart failure 4. Hypertension 5. Iron deficiency anemia 6. Leukemia 7. Myocardial infarction 8. Sickle cell anemia

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		c. Research the impact of emerging technology on the cardiovascular system. (7) Unit 14: Respiratory System a. Describe the structures and functions of the respiratory system. i. Define inspiration and expiration. ii. Identify the structures of the respiratory system and their respective functions. 1. Alveoli 2. Bronchi 3. Bronchioles 4. Epiglottis 5. Larynx 6. Lungs 7. Nasal cavity 8. Nasal septum 9. Nose 10. Pharynx 11. Pleura 12. Sinuses 13. Trachea iii. Differentiate among internal, external, and cellular respiration. b. Discuss diseases and disorders of the respiratory system and related signs, symptoms, and treatment methods.

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		i. Identify the general signs, symptoms, treatment, and prevention methods associatedwith respiratory diseases and disorders. 1. Asthma 2. Bronchitis 3. COPD 4. Covid 19 5. Emphysema 6. Influenza 7. Lung cancer 8. Pneumonia 9. Sleep apnea 10. Tuberculosis c. Research the impact of emerging technology on the respiratory system. (8) Unit 15: Digestive System a. Describe the structures and functions of the digestive system. i. Describe the structures comprising the alimentary canal and their respective functions regarding the digestive process (pathway of food, digestion, nutrient absorption). 1. Mouth: teeth, tongue, hard palate, soft palate 2. Pharynx

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		3. Esophagus 4. Cardiac/esophageal sphincter 5. Stomach (include rugae) 6. Pyloric sphincter 7. Small intestine (include villi) a. Duodenum b. Ileum c. Jejunum 8. Large intestine a. Cecum b. Ascending colon c. Transverse colon d. Descending colon e. Sigmoid colon 9. Rectum 10. Anus ii. Describe the accessory structures of the digestive system and their respective functions regarding the digestive process (pathway of food, digestion, nutrient absorption). 1. Salivary glands 2. Pancreas 3. Liver 4. Appendix 5. Gallbladder

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		b. Discuss diseases and disorders of the digestive system and related signs, symptoms, treatment, and prevention methods. i. Identify the general signs, symptoms, treatment, and prevention methods associatedwith diseases and disorders of the digestive system. 1. Appendicitis 2. Cholecystitis 3. Cirrhosis 4. Diverticulitis 5. Gastric ulcer 6. GERD 7. Hepatitis type B (HBV) 8. Pancreatitis 9. Ulcerative colitis c. Research the impact of emerging technology on the digestive system. (9) Unit 16: Urinary System a. Explain the structures and functions of the urinary system as they relate to the formation, composition, and elimination of urine. i. Identify urinary system structures and their respective functions. 1. Bladder (include rugae) 2. Bowman's capsule

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		3. Cortex 4. Glomerulus 5. Hilum 6. Kidneys 7. Medulla 8. Nephrons 9. Renal pelvis 10. Ureters 11. Urethra 12. Urinary meatus b. Discuss diseases and disorders of the urinary system and related causes, signs, symptoms, treatment, and prevention methods. i. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases of the urinary system. 1. Cystitis 2. Glomerulonephritis 3. Pyelonephritis 4. Renal calculus 5. Renal failure 6. Uremia 7. Urethritis ii. Define disorders of the urinary system. 1. Albuminuria

Course Name: Health Science Core 1 (995102)	**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.

2. Anuria
3. Dysuria
4. Hematuria
5. Incontinence
6. Nocturia
7. Oliguria
8. Polyuria
9. Proteinuria
10. Pyuria
11. Retention

c. Research the impact of emerging technology on the urinary system.

(10) Unit 17: Lymphatic System

a. Explain the structures and functions of the lymphatic system.
   i. Identify structures of the lymphatic system and their respective functions.
      1. Tonsils
      2. Spleen
      3. Lymph nodes
      4. Thymus

b. Discuss diseases and disorders of the lymphatic system and related causes, signs,symptoms, treatment, and prevention methods.

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		i. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the lymphatic system. 1. Adenitis 2. Hodgkin's disease 3. Splenomegaly 4. Tonsillitis c. Research the impact of emerging technology on the lymphatic system. (11) Unit 18: Nervous System a. Describe the structures and functions of the nervous system. i. Identify the major structures of the nervous system and their respective functions. 1. Cerebellum 2. Cerebrum 3. Midbrain: pons, medulla oblongata 4. Diencephalon: thalamus, hypothalamus 5. Spinal cord 6. Meninges: dura mater, arachnoid membrane, pia mater 7. Ventricles 8. Cerebral spinal fluid ii. Describe the divisions of the nervous system. 1. Central nervous system

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		2. Peripheral nervous system 3. Sympathetic 4. Parasympathetic iii. Identify the structures of a neuron and the conduction process of a nerve impulse. 1. Dendrites 2. Axon 3. Myelin sheath 4. Synapse 5. Neurotransmitters b. Discuss diseases and disorders of the nervous system and related causes, signs, symptoms, treatment, and prevention methods. i. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the nervous system 1. Alzheimer's disease 2. Amyotrophic lateral sclerosis 3. Cerebral palsy 4. Cerebrovascular accident 5. Dementia 6. Epilepsy 7. Meningitis 8. Multiple sclerosis 9. Parkinson's disease

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		10. Shingles 11. Traumatic Brain Injury/Concussion c. Research the impact of emerging technology on the nervous system. DOK3 (12) Unit 19: Endocrine System a. Identify the structures and functions of the endocrine system. DOK1 i. Differentiate between endocrine and exocrine. ii. Identify the structures comprising the endocrine system and their respective functions. b. Discuss diseases and disorders of the endocrine system and related causes, signs, symptoms, treatment, and prevention methods. DOK2 i. Identify the general causes, signs, symptoms, treatment, and prevention methodsassociated with diseases and disorders of the endocrine system. 1. Acromegaly 2. Cushing's syndrome 3. Diabetes mellitus (Type 1 and 2) 4. Dwarfism 5. Giantism 6. Graves' disease 7. Hyperthyroidism 8. Hypothyroidism

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		c. Research the impact of emerging technology on the endocrine system. DOK3 i. Endocrine Table ii. Gland iii. Hormone iv. Action v. Pituitary (Anterior Lobe) vi. ACTH-adrenocorticotropic 1. Stimulates growth and secretion of the cortex of the adrenal gland vii. TSH-thyrotropin 1. Stimulates growth and secretion of the thyroid gland viii. GH-somatotropin 1. Growth hormone; stimulates normal body growth ix. Pituitary (Posterior Lobe) x. ADH-vasopressin 1. Antidiuretic hormone; promotes reabsorption of water in kidneys, constrictsblood vessels xi. Thyroid xii. Thyroxine & tri-iodothyronine

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		1. Increase metabolic rate; stimulate physical and mental growth; regulate metabolism of carbohydrates, fats, and proteins xiii. Adrenal (Cortex) xiv. Glucocorticoids: 1. Cortisol-hydrocortisone 2. Cortisone a. Aide in metabolism of proteins, fats, and carbohydrates; increase amount of glucose in blood; provide resistance to stress; depress immune response (anti- inflammatory) xv. Gonadocorticoids: 1. Estrogens 2. Androgens a. Act as sex hormones b. Stimulate female sexual characteristics c. Stimulate male sexual characteristics xvi. Adrenal (Medulla) xvii. Epinephrine (adrenaline) 1. Activates sympathetic nervous system; acts in times of stress to increase cardiac output and increase blood pressure xviii. Norepinephrine

Course Name: Health Science Core 1 (995102)	**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.

1. Activates body in stress situations

xix. Pancreas

xx. Insulin

1. Used in metabolism of glucose (sugar) by promoting entry of glucose intocells to decrease blood glucose levels; promotes transport of fatty acids and amino acids (proteins) into the cells

(13) Unit 20: Sensory Organs

a. Identify the basic structures and functions associated with the sensory organs.

i. Identify sensory organs' structures and describe their respective functions.

1. Eye:

a. Aqueous humor
b. Choroid coat
c. Conjunctiva
d. Cornea
e. Iris
f. Lacrimal glands
g. Lens
h. Pupil
i. Retina
j. Sclera
k. Vitreous Humor

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		2. Ear: a. Auditory canal b. Cochlea c. Eustachian Tube d. Organ of Corti e. Ossicles f. Pinna/Auricle g. Semicircular canal h. Tympanic membrane 3. Tongue: a. Papillae 4. Nose: a. Olfactory receptors b. Discuss diseases and disorders of the sensory organs. i. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the sensory organs. 1. Amblyopia 2. Astigmatism 3. Cataract 4. Conjunctivitis 5. Glaucoma 6. Hearing loss (conductive, sensory) 7. Meniere's disease 8. Otitis externa

Course Name: Health Science Core 1 (995102)	**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.

9. Otitis media
10. Otosclerosis
11. Strabismus

c. Research the impact of emerging technology on the sensory organs.

(14) Unit 21: Reproductive System

a. Discuss the structures and functions of the male and female reproductive systems.
   i. Identify the major structures of the male and female reproductive system and their respective functions.
      1. Male:
         a. Cowper's gland
         b. Ejaculatory ducts
         c. Epididymis
         d. Penis
         e. Prostate gland
         f. Scrotum
         g. Seminal vesicles
         h. Testes
         i. Urethra
         j. Vas deferens
      2. Female:
         a. Bartholin's glands
         b. Breasts
         c. Fallopian tubes

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		d. Ovaries e. Perineum f. Uterus: endometrium g. Vagina h. Vulva: mons pubis, labia majora, labia minora b. Discuss diseases and disorders of the reproductive system and related signs, symptoms, treatment, and prevention methods. i. Identify the general signs, symptoms, treatment, and prevention methods associatedwith diseases and disorders of the reproductive systems. 1. Breast cancer 2. Cervical cancer 3. Endometriosis 4. Epididymitis 5. Orchitis 6. Ovarian cancer 7. Pelvic inflammatory disease 8. Premenstrual syndrome 9. Prostate cancer 10. Prostatic hypertrophy 11. Testicular cancer 12. Uterine cancer

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		ii. Identify the general signs, symptoms, treatment, and prevention methods associatedwith sexually transmitted infections (STIs). 1. Human Immunodeficiency Virus 2. Chlamydia 3. Gonorrhea 4. Herpes 5. Human Papillomavirus 6. Pubic lice 7. Syphilis 8. Trichomoniasis c. Research the impact of emerging technology on the reproductive system.
Unit 14: Human Growth and Development The chapter "Human Growth and Development" explores the physical, emotional, and social changes individuals experience throughout the life span, helping health care workers provide compassionate and age-appropriate care. The first section examines developmental milestones from conception through adolescence, allowing students to recognize typical and atypical patterns of growth and behavior. The second section focuses on aging, highlighting the common physical and emotional changes	160 minutes 4 periods	(1) Unit 3: Career Preparation a. Explore the various career options in the health care field. DOK1 i. Human growth and development ii. Rehabilitative services

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
that occur in later adulthood and the importance of supporting independence and wellness in older patients. The third section addresses disabilities and the role changes they bring, teaching students how to encourage adaptation and promote dignity for individuals facing physical challenges at any age. The final section prepares students to support patients at the end of life, offering insight into the emotional stages of terminal illness and the principles of hospice care. Together, these sections equip future health care workers with the understanding and empathy needed to care for individuals at every stage of life.		
Unit 15: Mental Illness The chapter "Mental Illness" provides students with a foundational understanding of mental health disorders, their symptoms, and the methods used to treat them. The first section introduces various classifications of mental illness, including anxiety disorders, depressive and bipolar disorders, trauma-related conditions, eating disorders, and neurocognitive disorders such as Alzheimer's disease. Students learn to recognize common features of these conditions and the risk	100 minutes 2 periods	(1) Unit 3: Career Preparation a. Explore the various career options in the health care field. DOK1 i. Mental health

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
factors that may contribute to their development. The second section focuses on treatment options, highlighting the role of psychotherapy, medication, hospitalization, and support from national mental health organizations. It also discusses challenges such as noncompliance with medication and the need for specialized care for disorders like Alzheimer's. This chapter encourages empathy and awareness, preparing future health care workers to identify signs of mental illness and support individuals in seeking appropriate care.		
Unit 16: Nutrition The chapter "Nutrition" emphasizes the essential role of proper nutrition in maintaining health and supporting recovery, both for health care workers and the patients they serve. In the first section, students learn the basic principles of nutrition, including the functions of food, the five key nutrients, and the importance of following dietary guidelines such as MyPlate. The section also explores health issues related to poor nutrition, including obesity and common diet-related disorders, while introducing students to volume conversions and therapeutic diets. The second section focuses	110 minutes 2 periods	

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
more specifically on therapeutic diets used to manage various physical conditions and illnesses. Students also examine the impact of eating disorders and substance abuse on overall health. This chapter equips future health care professionals with the knowledge needed to support healthy dietary habits and understand the nutritional needs of diverse patient populations.		
Unit 17: Controlling Infection The chapter "Controlling Infection" provides students with the knowledge and techniques needed to prevent the spread of infectious diseases in health care settings. The first section introduces microorganisms, explaining the differences between beneficial and harmful microbes, how they grow and spread, and the signs of localized versus generalized infections. The second section focuses on aseptic techniques and Standard Precautions, emphasizing proper hygiene practices such as handwashing, the use of protective equipment, and the importance of maintaining a clean environment to stop the transmission of pathogens. In the third section, students learn about Transmission-Based Precautions, including specialized	190 minutes 4 periods	(1) Unit 5: Infection Awareness and Prevention a. Explain the principles of infection control. i. Research and explain: 1. Chain of infection 2. Mode of transmission: direct, indirect, vectors, common vehicle (air, food, water), health care associated infections (nosocomial), opportunistic. 3. Types of infections: endogenous, exogenous 4. Microorganisms: nonpathogenic, pathogenic, aerobic, anaerobic ii. Classify the following microorganisms and diseases: 1. Bacterial: a. Meningitis b. Methicillin-resistant staphylococcus c. Pertussis d. Pneumonia

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
procedures for dealing with patients or materials that pose a higher risk of infection. The final section covers bloodborne diseases, including HIV and hepatitis, and outlines Universal Precautions to protect health care workers from exposure. This chapter equips future professionals with critical skills to maintain safety and prevent infection for themselves, their patients, and the broader community.		e. Strep throat f. Tetanus g. Tuberculosis 2. Fungal: a. Athlete's foot b. Histoplasmosis c. Ring Worm d. Thrush e. Yeast vaginitis 3. Parasites (Helminths): a. Hook worms or flukes b. Pin worms c. Tape worms 4. Parasites (Rickettsia): a. Rocky Mountain spotted fever b. Typhus fever 5. Protozoa: a. Amebic dysentery b. Malaria 6. Viruses: a. Chicken pox b. Covid 19 c. Common cold d. Hepatitis (A, B, C) e. Herpes

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		f. HIV g. Influenza (seasonal, H1N1, H5N1) h. Measles i. Mumps j. Polio k. RSV l. Warts m. West Nile virus (WNV) iii. Identify the levels of aseptic control. 1. Antisepsis 2. Disinfection 3. Sterilization iv. Demonstrate the proper procedure for aseptic hand washing according to the CDC. b. Explain standard precaution based on OSHA and CDC regulations. DOK3 i. Describe OSHA's blood-borne pathogen standards. ii. Explore employer requirements according to the Needle Stick Safety and Prevention Act c. Utilize the principles of sterile technique. DOK3 i. Demonstrate skills related to sterile technique. 1. Donning sterile gloves 2. Sterile dressing 3. Maintaining a sterile field 4. Wrapping instruments for sterilization

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		d. Explain the importance of maintaining transmission-based isolation precautions. DOK3 i. Identify and explain the types of isolation precautions needed to prevent the spread of communicable diseases (mentioned in 1.b.). 1. Airborne 2. Droplet 3. Contact 4. Reverse/protective ii. Demonstrate the proper procedure, according to the CDC, for donning and doffing personal protective equipment (PPE). 1. Gowns 2. Masks 3. Goggles 4. Gloves e. Research the impact of emerging technology on infection control. DOK3 f. Discuss other prevalent or interesting diseases/infections, including: i. Ebola/Marburg ii. Zika virus iii. Lyme disease g. Research and describe the following vaccinations and diseases they prevent:

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		i. Covid 19 ii. DTaP iii. Hep B iv. HPV v. Influenza vi. Meningitis vii. MMR viii. Monkey Pox ix. Polio x. Shingles xi. Smallpox xii. Varicella h. Based on the research on vaccinations, facilitate a student led debate on the importance of vaccinations.
Unit 18: Patient and Employee Safety The chapter "Patient and Employee Safety" prepares students to maintain a safe environment for themselves, their coworkers, and the patients in their care. The first section introduces general safety principles, workplace responsibilities, and OSHA regulations that govern health and safety practices in clinical settings. Students learn about injury and illness prevention programs, hazard communication, and the shared roles of employers and employees in	340 minutes 8 periods	(1) Unit 2: Safety in Health Care a. Demonstrate personal and environmental safety practices. DOK2 i. Apply principles of body mechanics. ii. Based on regulations set by the Occupational Safety and Health Association (OSHA and the Center for Disease Control and Prevention (CDC), apply safety techniques (personal and patient) in the health care setting to prevent accidents and injuries. b. Identify common safety hazards. DOK2

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
reducing risks. The chapter then covers specific strategies for ensuring patient safety, such as the proper use of mobility aids, side rails, and postural supports. In the disaster preparedness section, students explore emergency response procedures for events like fires, natural disasters, and bioterrorism. The chapter also teaches the principles of body mechanics to prevent workplace injuries, as well as essential first aid techniques for treating wounds, shock, and airway emergencies. The final section focuses on CPR, equipping students with life-saving skills and an understanding of automated external defibrillator (AED) use. This chapter provides the practical knowledge and skills needed to protect health care professionals and the individuals they serve.		i. Comply with safety signs, symbols, and labels in accordance with OSHA and the CDC. c. Utilize emergency procedures and protocols. DOK3 i. Practice fire safety and discuss fire evacuation plans in a health care setting. Include the following: 1. PASS – Pull, Aim, Squeeze, Sweep 2. RACE – Rescue, Activate, Contain, Extinguish/Evacuate 3. Apply principles of basic emergency response in natural disasters and other emergencies to include: 4. Safe location 5. Contact emergency personnel 6. Follow facility protocols
Unit 19: Measuring Vital Signs and Other Clinical Skills The chapter "Measuring Vital Signs and Other Clinical Skills" equips students with essential tools to assess and support patient health in a clinical setting. In the first section, students learn how to measure temperature, pulse, and respiration—core indicators of a patient's well-being—and explore the factors	640 minutes 14 periods	

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that influence these vital signs. The second section focuses on blood pressure, completing the set of four key vital signs, and teaches students how to accurately measure and interpret systolic and diastolic readings. The final section introduces a range of basic nursing skills and assistive techniques used to ensure patient hygiene, comfort, nutrition, mobility, and safety. Students also learn how to prevent pressure sores, assist with prosthetic devices, collect specimens, and monitor for signs of dehydration or incontinence. Together, these sections provide a foundation for high-quality, compassionate care and prepare students to perform key clinical tasks as part of a health care team.		
Unit 20: Medical Assisting and Laboratory Skills The chapter "Medical Assisting and Laboratory Skills" introduces students to the core responsibilities and competencies required of medical assistants and laboratory technicians. The first section focuses on medical assisting duties, covering both administrative tasks—such as patient registration and appointment scheduling—	350 minutes 8 periods	(1) Unit 2: Safety in Health Care a. Identify common safety hazards. DOK2 i. Recognize Safety Data Sheets (SDS) and discuss safety implications of handling hazardous materials (checking labels and checking solutions). (2) Unit 3: Career Preparation a. Explore the various career options in the health care field. DOK1 i. Pharmacology ii. Laboratory services

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
and clinical procedures like measuring vital signs, preparing patients for exams, and recording key health data. The second section emphasizes pharmacology and medication administration, teaching students how to calculate dosages, interpret prescription abbreviations, handle controlled substances, and follow safety protocols for medication preparation and delivery. In the final section, students learn fundamental laboratory skills, including specimen collection, safety procedures, autoclave operation, and basic diagnostic tests like CBCs, hemoglobin, and hematocrit. This chapter equips future health care workers with the versatile skill set needed to support clinical operations and ensure quality patient care in both medical and laboratory settings.		(3) Unit 5: Infection Awareness and Prevention i. Demonstrate the basic rules of standard precaution. b. Utilize the principles of sterile technique. DOK3 i. Demonstrate skills related to sterile technique. (4) Unit 6: Legal and Ethical Practices in Health Care a. Utilize procedures for reporting activities and behaviors that affect the health, safety, and the welfare of others. DOK2 i. Complete an incident report.
Unit 21: Therapeutic Techniques and Sports Medicine The chapter "Therapeutic Techniques and Sports Medicine" introduces students to the principles and practices of physical therapy and rehabilitation. It explores how therapeutic methods—such as exercise, massage, hydrotherapy, light and heat treatments—are used to restore movement,	170 minutes 4 periods	(1) Unit 3: Career Preparation a. Explore the various career options in the health care field. i. Sports medicine ii. Rehabilitative services

Course Name: Health Science Core 1 (995102)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
build strength, and improve quality of life for individuals recovering from injury, surgery, or living with physical disabilities. Students learn the roles and responsibilities of physical therapy and sports medicine aides, as well as how to apply treatments like diathermy, cryotherapy, thermotherapy, ultrasound, and ultraviolet light. The chapter also covers range of motion exercises, guarding techniques, and the safe use of ambulation and transport devices. With this knowledge, students gain a deeper understanding of how rehabilitation supports healing and helps patients regain independence in daily activities.		
Unit 22: Responsibilities of a Dental Assistant The chapter "Responsibilities of a Dental Assistant" introduces students to the multifaceted role of dental assistants in supporting dentists and ensuring efficient, high-quality oral care. Students learn about the wide range of responsibilities dental assistants manage, from preparing treatment rooms and sterilizing instruments to assisting with procedures and educating patients on proper oral hygiene. The chapter covers the	120 minutes 3 periods	

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anatomy and identification of teeth, including distinctions between anterior and posterior teeth, as well as deciduous and permanent teeth. Students also become familiar with dental equipment, instrument names, and techniques for brushing and flossing, including the use of disclosing tablets and the Bass method. This chapter prepares students to perform essential clinical, laboratory, and patient-focused tasks within a dental office.		
Appendix A CDC Recommendations for Standard Precautions		
Appendix B Clinical Internship		(1) Unit 3: Career Preparation a. Utilize the approved method of clinical hour documentation (e.g., AET or other state approved method of documentation). DOK2

Scope & Sequence – Pearson Anatomy, Physiology, and Disease, 6th Edition, ©2024

Course Name: Health Science Core 2 (995103)	**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
Course Description: This textbook provides a foundational understanding of human anatomy, physiology, and the interconnected systems that support life and health. It begins with the basic building blocks of the body—cells, tissues, and organs—before exploring the major body systems, including the skeletal, muscular, nervous, cardiovascular, respiratory, digestive, urinary, endocrine, immune, and reproductive systems. Each system is examined in terms of structure, function, and its role in maintaining homeostasis. The text also introduces essential scientific principles, diagnostic tools, and the impact of aging on the body. Additional chapters highlight the importance of healthy living, the growing role of forensic science, and offer guidance on exploring careers in health care. Together, these topics provide a well-rounded introduction for students entering the medical or health sciences field.	
NOTE: This is a suggested scope and sequence for the course content.	

Total Number of Periods **Total Number of Minutes** **Total Number of Hours**	X periods 7,875 minutes 131.25 hours*	*Schedule calculations based on 175/180 calendar days. Scope and sequence allows additional time for guest speakers, student presentations, field trips, remediation, extended learning activities, etc.
Unit Number, Title, and Brief Description	**# of Class Periods*** (assumes 45-minute periods) Total minutes per unit	**Standards**
Unit 1: Anatomy, Physiology, and Disease This chapter introduces the essential building blocks of healthcare knowledge, beginning with the study of the body's structure (anatomy) and function (physiology), and how diseases (pathology) can disrupt both. It highlights the importance of medical terminology as the universal language used to describe conditions, procedures, and body	3 periods 120 minutes	(1) Identify the general signs, symptoms, treatment, and prevention methods associated with respiratory diseases and disorders. a. Covid 19

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
systems. You'll also explore how the body maintains balance through homeostasis, how metabolism fuels life processes, and how signs and symptoms help identify illness. Finally, the chapter touches on how diseases are diagnosed and how the body defends itself against infection, laying a strong foundation for deeper studies in health and medicine.		
Unit 2: The Human Body This chapter focuses on how healthcare professionals describe the human body with precision and clarity. It begins with the anatomical position—a universal starting point used to ensure consistency when referencing the body. You'll explore different body positions used in clinical settings, along with the planes and directional terms that help divide and navigate the body. The chapter also introduces the body's major cavities and specific regions, which are essential for locating organs and understanding medical procedures. Finally, you'll learn how modern imaging techniques like x-rays and MRIs allow us to view internal structures in detail, supporting accurate diagnosis and treatment.	2 periods 105 minutes	

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Unit 3: Biochemistry This chapter explores the chemical foundations of life, beginning with atoms and elements—the basic building blocks of all matter. You'll learn how atoms combine to form molecules, including essential biological compounds like proteins, carbohydrates, lipids, and nucleic acids. The chapter also covers ions and electrolytes, the role of pH in maintaining balance in the body, and the importance of water as the universal solvent. Key concepts such as chemical bonding, cellular energy production through ATP, and the role of enzymes in metabolism are introduced, laying the groundwork for understanding how chemistry drives every function in the human body.	2 periods 80 minutes	
Unit 4: The Cells This chapter explores the structure and function of cells—the fundamental units of all living organisms. You'll learn about the	3 periods 155 minutes	(1) Differentiate among internal, external, and cellular respiration.

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
organelles that carry out essential cellular processes, how substances move across cell membranes, and why proper transport is vital for health. The chapter also explains how cells generate energy through ATP, how they grow and divide through mitosis and meiosis, and how errors in these processes can lead to diseases like cancer. Finally, it introduces different types of microorganisms—including bacteria, viruses, fungi, and protozoa—highlighting their roles in both health and disease.		
Unit 5: Tissues and Systems This chapter builds on the idea that while cells are the body's basic building blocks, they group together to form tissues, each with a specific role. You'll explore the four main types of tissues—epithelial, connective, muscle, and nervous—and learn how they combine to create organs. These organs, in turn, form systems that work together to keep the body functioning. The chapter introduces the body's 11 major systems and emphasizes how closely connected they are, especially when disease strikes. It also touches on how conditions like septicemia can affect multiple systems, highlighting the complexity of diagnosing and treating illness.	4 periods 160 minutes	(1) Identify the types of joints and their related movements. a. Diarthrosis or synovial (2) Compare the structures and functions of the muscular system with its relationship to movement. (3) Define the characteristics of skeletal muscle. (4) Research the impact of emerging technology on the muscular system. (5) Identify and discuss the structures and functions of the cardiovascular system and their role in maintaining homeostasis. (6) Describe the structures and functions of the respiratory system. (7) Describe the structures and functions of the digestive system. (8) Discuss the structures and functions of the male and female reproductive systems. (9) Discuss diseases and disorders of the reproductive system and related signs, symptoms, treatment, and prevention methods.

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		a. Identify the general signs, symptoms, treatment, and prevention methods associated with sexually transmitted infections (STIs). i. Pubic lice
Unit 6: The Skeletal System This chapter explores the skeletal system and its vital roles in support, protection, blood cell production, and mineral storage. You'll learn about the different types of bones and their internal structures, including the distinction between compact and spongy bone. The chapter also introduces the bone-forming and bone-recycling cells involved in growth and repair. You'll gain an understanding of joints, ligaments, and cartilage, and how they enable movement while withstanding stress. In addition, the chapter explains how the skeleton is divided into the axial and appendicular regions and discusses common skeletal conditions such as arthritis, osteoporosis, and tendonitis. Aging and injury are also addressed, with practical guidance on when to seek medical attention for bone and joint issues.	4 periods 170 minutes	(1) Compare the structures and functions of the skeletal system with its relationship to movement. a. Identify the axial and appendicular bones. b. Identify the parts of a bone. i. Diaphysis ii. Endosteum iii. Epiphysis iv. Medullary canal v. Periosteum vi. Red marrow vii. Yellow marrow c. Explain the functions of the skeletal system. i. Framework ii. Protection iii. Levers iv. Production of blood cells v. Storage d. Identify the types of joints and their related movements. i. Diarthrosis or synovial (2) Discuss diseases and disorders of the skeletal system and related signs, symptoms, treatment, and prevention methods.

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		a. Identify the general signs, symptoms, treatment, and prevention methods associated with skeletal diseases, disorders, and injuries. i. Bursitis ii. Osteomyelitis iii. Osteoporosis iv. Osteoarthritis v. Rheumatoid arthritis vi. Sprain vii. Ruptured disk viii. Dislocation ix. Spinal curvatures: scoliosis, lordosis, and kyphosis x. Fractures: stress, comminuted, compound or open, simple or closed, depressed, green stick, impacted, spiral (3) Research the impact of emerging technology on the skeletal system. (4) Demonstrate active/passive range of motion, including adduction, abduction, flexion, extension, rotation, and circumduction. (5) Discuss diseases and disorders of the endocrine system and related causes, signs, symptoms, treatment, and prevention methods. a. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the endocrine system. i. Dwarfism

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		ii. Giantism
Unit 7: The Muscular System This chapter introduces the body's three types of muscle—skeletal, smooth, and cardiac—and explains their roles in movement, internal function, and heart activity. You'll learn how muscles work by contracting and relaxing in coordination, often with the help of tendons that connect them to bones. At the microscopic level, muscle fibers contain sarcomeres, which rely on proteins like actin and myosin, along with ATP and calcium, to produce contraction. The chapter also highlights the essential connection between the muscular and nervous systems, where nerve signals trigger muscle movement through chemical messengers. Finally, it explores common muscular and neuromuscular disorders, emphasizing how these two systems are closely intertwined in both health and disease.	3 periods 135 minutes	(1) Compare the structures and functions of the muscular system with its relationship to movement. a. Identify the three types of muscle. i. Cardiac ii. Visceral/smooth iii. Skeletal b. Define the characteristics of skeletal muscle i. Contractibility ii. Extensibility iii. Elasticity c. Identify major skeletal muscles. i. Biceps brachii ii. Deltoid iii. Gastrocnemius iv. Gluteus maximus v. Intercostals vi. Latissimus dorsi vii. Pectoralis major viii. Quadriceps femoris ix. Rectus abdominis x. Sternocleidomastoid xi. Tibialis anterior

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		xii. Trapezius xiii. Triceps brachii d. Explain the function of the muscles. i. Movement ii. Produce heat and energy iii. Maintain Posture iv. Protect internal organs e. Demonstrate active/passive range of motion, including adduction, abduction, flexion, extension, rotation, and circumduction. (2) Discuss diseases, disorders, and injury of the muscular system and related signs, symptoms, and treatment methods. a. Identify the general signs, symptoms, treatment, and prevention methods associated with muscular diseases and disorders. i. Muscle spasms ii. Muscular dystrophy iii. Myasthenia gravis iv. Strain (3) Identify the general signs, symptoms, treatment, and prevention methods associated with cardiovascular diseases and disorders.
Unit 8: The Integumentary System This chapter highlights the skin as the body's largest and one of its most versatile organs. Far more than just a covering, the skin acts as	3 periods 150 minutes	(1) Identify the general signs, symptoms, treatment, and prevention methods associated with cardiovascular diseases and disorders.

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a protective barrier against infection and injury, helps regulate body temperature, stores fat, and even plays a role in vitamin D production and waste elimination. You'll learn about the three main layers of the skin—the epidermis, dermis, and subcutaneous fascia—and how the skin constantly renews itself. The chapter also discusses the roles of skin glands, hair, and nails, and introduces how burns are assessed based on their depth and coverage. Together, these components form the integumentary system, a vital first line of defense and regulation.		
Unit 9: The Nervous System This chapter explores the nervous system as the body's command center and communication network. It explains how the central nervous system (CNS)—made up of the brain and spinal cord—works alongside the peripheral nervous system (PNS) to gather sensory input, process information, and generate motor responses. You'll learn about the roles of neurons and neuroglia, how electrical signals travel, and how information is transmitted across synapses. The chapter also covers the brain's structure and specialized regions, the protective layers	6 periods 250 minutes	(1) Define the characteristics of skeletal muscle. a. Excitability (2) Describe the structures and functions of the nervous system. a. Identify the major structures of the nervous system and their respective functions. i. Cerebellum ii. Cerebrum iii. Diencephalon: thalamus, hypothalamus iv. Spinal cord v. Meninges: dura mater, arachnoid membrane, pia mater vi. Ventricles vii. Cerebral spinal fluid b. Describe the divisions of the nervous system.

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
and fluids surrounding the CNS, and how the autonomic system manages involuntary functions like stress responses and daily body regulation. Finally, it introduces common nervous system disorders, emphasizing the importance of early diagnosis and the challenges of treatment.		i. Sympathetic ii. Parasympathetic c. Identify the structures of a neuron and the conduction process of a nerve impulse. i. Dendrites ii. Axon iii. Myelin sheath iv. Synapse v. Neurotransmitters (3) Discuss diseases and disorders of the nervous system and related causes, signs, symptoms, treatment, and prevention methods. a. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the nervous system. i. Alzheimer's disease ii. Amyotrophic lateral sclerosis iii. Cerebral palsy iv. Cerebrovascular accident v. Dementia vi. Epilepsy vii. Meningitis viii. Shingles ix. Traumatic Brain Injury/Concussion (4) Identify the basic structures and functions associated with the sensory organs.

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
Unit 10: The Endocrine System This chapter introduces the endocrine system and its crucial role in regulating the body alongside the nervous system. Unlike the rapid signals of nerves, hormones travel more slowly through the bloodstream, but their effects are longer lasting. You'll learn how hormones influence target cells, how feedback loops—especially negative feedback—maintain balance, and how hormone release is triggered by various internal signals. The chapter also explores major endocrine glands like the pituitary, thyroid, pancreas, and adrenal glands, explaining their functions and the disorders that result from hormonal imbalances. Conditions such as diabetes, hypothyroidism, hyperthyroidism, and Cushing's syndrome illustrate the complexity and importance of hormone regulation in overall health.	3 periods 150 minutes	(1) Identify the structures and functions of the endocrine system. a. Differentiate between endocrine and exocrine. b. Identify the structures comprising the endocrine system and their respective functions. (see table below) i. Pituitary (Anterior Lobe) ACTH-adrenocorticotropic Stimulates growth and secretion of the cortex of the adrenal gland ii. TSH-thyrotropin Stimulates growth and secretion of the thyroid gland iii. GH-somatotropin Growth hormone; stimulates normal body growth iv. Pituitary (Posterior Lobe) ADH-vasopressin Antidiuretic hormone; promotes reabsorption of water in kidneys, constricts blood vessels v. Thyroid Thyroxine & tri-iodothyronine Increase metabolic rate; stimulate physical and mental growth; regulate metabolism of carbohydrates, fats, and proteins vi. Adrenal (Cortex) Glucocorticoids: vii. Cortisol-hydrocortisone viii. Cortisone ix. Aide in metabolism of proteins, fats, and carbohydrates; increase amount of glucose in blood; provide resistance to stress; depress immune response (anti-inflammatory)

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		x. Act as sex hormones xi. Stimulate female sexual characteristics xii. Stimulate male sexual characteristics xiii. Adrenal (Medulla) Epinephrine (adrenaline) Activates sympathetic nervous system; acts in times of stress to increase cardiac output and increase blood pressure xiv. Norepinephrine Activates body in stress situations xv. Pancreas xvi. Insulin (2) Discuss diseases and disorders of the endocrine system and related causes, signs, symptoms, treatment, and prevention methods. a. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the endocrine system. i. Acromegaly ii. Cushing's syndrome iii. Diabetes mellitus (Type 1 and 2) iv. Graves' disease
Unit 11: The Senses This chapter explores the body's sensory systems and how they help us experience and respond to the world around us. It introduces the special senses—sight, hearing, balance, taste, and smell—and explains how	3 periods 135 minutes	(3) Identify the basic structures and functions associated with the sensory organs. a. Identify sensory organs' structures and describe their respective functions. i. Eye: 1. Aqueous humor

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each one functions. You'll learn how the eye processes light to create vision, how the ear detects sound and maintains balance, and how taste and smell are closely linked through specialized receptors. The chapter also touches on general senses like touch, temperature, and pain, which allow us to detect physical stimuli throughout the body. Together, these senses form a complex network that keeps us informed and responsive to our environment.		2. Choroid coat 3. Conjunctiva 4. Cornea 5. Iris 6. Lacrimal glands 7. Lens 8. Pupil 9. Retina 10. Sclera 11. Vitreous Humor ii. Ear: 1. Auditory canal 2. Cochlea 3. Eustachian Tube 4. Organ of Corti 5. Ossicles 6. Pinna/Auricle 7. Semicircular canal 8. Tympanic membrane (4) Discuss diseases and disorders of the sensory organs. a. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the sensory organs. i. Amblyopia ii. Astigmatism

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		iii. Cataract iv. Conjunctivitis v. Glaucoma vi. Hearing loss (conductive, sensory) vii. Meniere's disease viii. Otitis externa ix. Otitis media x. Otosclerosis xi. Strabismus
Unit 12: The Cardiovascular System This chapter introduces the cardiovascular system as the body's essential transportation network, delivering oxygen, nutrients, and hormones to tissues while removing waste products from cellular metabolism. You'll learn how the heart functions as two coordinated pumps—one sending blood to the lungs for oxygenation, the other pushing oxygen-rich blood throughout the body. The chapter also explains the roles of arteries, veins, and capillaries, and how their structure supports efficient circulation. In addition to transporting vital substances, the cardiovascular system helps regulate body temperature, fluid balance, and immune defense. The composition of blood—including red and white blood cells, plasma,	5 periods 220 minutes	(1) Identify and discuss the structures and functions of the cardiovascular system and their role in maintaining homeostasis. a. Identify the components of blood and their respective functions. i. Plasma ii. Erythrocytes iii. Hemoglobin iv. Leukocytes v. Thrombocytes b. Identify the type of blood vessels and the action of each. i. Aorta ii. Arteries iii. Arterioles iv. Capillaries v. Inferior vena cava vi. Pulmonary artery

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and platelets—is covered, along with the mechanisms that regulate blood pressure through heart function, blood volume, and the kidneys.		vii. Pulmonary veins viii. Superior vena cava ix. Veins x. Venules c. Identify the anatomy of the heart. i. Layers: endocardium, myocardium, pericardium/epicardium ii. Structures: septum, right/left atriums, right/left ventricles, tricuspid valve, pulmonary valve, bicuspid/mitral valve, aortic valve d. Describe the electrical conduction pathway. i. SA node ii. AV node iii. Bundle of HIS iv. Right and left bundle branches v. Purkinje Fibers e. Describe the pathway of pulmonary and systemic circulation. f. Define systole and diastole. g. Identify the general signs, symptoms, treatment, and prevention methods associated with cardiovascular diseases and disorders. i. Arteriosclerosis ii. Atherosclerosis iii. Congestive heart failure

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		iv. Hypertension v. Iron deficiency anemia vi. Myocardial infarction vii. Sickle cell anemia (2) Research the impact of emerging technology on the cardiovascular system.
Unit 13: The Respiratory System This chapter explores the respiratory system and its critical role in gas exchange—bringing oxygen into the body and removing carbon dioxide. Air travels through a branching network of airways, from the trachea to bronchioles, and finally to alveoli where oxygen enters the bloodstream and waste gases exit. The upper airways filter, warm, and humidify incoming air while also supporting smell and speech. Specialized structures like the epiglottis, tonsils, and cilia help protect the lungs from harmful particles and pathogens. The diaphragm and accessory muscles drive breathing, guided by signals from the brain's respiratory control center. Altogether, the system moves an impressive volume of air daily to support cellular function and overall health.	4 periods 200 minutes	(1) Describe the structures and functions of the respiratory system. a. Define inspiration and expiration. b. Identify the structures of the respiratory system and their respective functions. i. Alveoli ii. Bronchi iii. Bronchioles iv. Epiglottis v. Larynx vi. Lungs vii. Nasal cavity viii. Nasal septum ix. Nose x. Pharynx xi. Pleura xii. Sinuses xiii. Trachea

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		c. Differentiate among internal, external, and cellular respiration. (2) Discuss diseases and disorders of the respiratory system and related signs, symptoms, and treatment methods. a. Identify the general signs, symptoms, treatment, and prevention methods associated with respiratory diseases and disorders. i. Asthma ii. Bronchitis iii. COPD iv. Emphysema v. Influenza vi. Lung cancer vii. Pneumonia viii. Sleep apnea ix. Tuberculosis (3) Discuss diseases and disorders of the lymphatic system and related causes, signs, symptoms, treatment, and prevention methods. a. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the lymphatic system. i. Splenomegaly (4) Identify the basic structures and functions associated with the sensory organs.

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		a. Identify sensory organs' structures and describe their respective functions. i. Nose: 1. Olfactory receptors
Unit 14: The Lymphatic and Immune Systems This chapter explores how the lymphatic system supports the immune system by transporting fluid, housing white blood cells, and filtering harmful substances from the body. You'll learn how lymph nodes, vessels, and organs like the spleen and thymus work together to detect and destroy pathogens, while also returning fluid to the bloodstream. The immune system itself is divided into two parts: innate immunity, which offers fast, general defense, and adaptive immunity, which targets specific threats and builds long-term memory. You'll also discover how white blood cells coordinate immune responses, how inflammation and fever act as defense mechanisms, and how the body distinguishes between self and foreign antigens. The chapter concludes with a look at immune system disorders, including autoimmune diseases like rheumatoid arthritis and lupus, and immune-deficiency conditions such as	4 periods 160 minutes	(1) Explain the structures and functions of the lymphatic system. a. Identify structures of the lymphatic system and their respective functions. i. Tonsils ii. Spleen iii. Lymph nodes iv. Thymus (2) Discuss diseases and disorders of the lymphatic system and related causes, signs, symptoms, treatment, and prevention methods. a. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the lymphatic system. i. Hodgkin's disease ii. Tonsillitis (3) Discuss diseases and disorders of the reproductive system and related signs, symptoms, treatment, and prevention methods. a. Identify the general signs, symptoms, treatment, and prevention methods associated with sexually transmitted infections (STIs). i. Human Immunodeficiency Virus

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
HIV/AIDS, showing the delicate balance required to keep the body protected.		
Unit 15: The Gastrointestinal System This chapter examines the digestive system, a complex tube-like structure that processes food from intake to elimination. You'll learn how digestion involves both mechanical and chemical breakdown of food into nutrients the body can absorb and use. The small intestine plays a central role in nutrient absorption, while accessory organs like the liver, gallbladder, and pancreas support digestion by producing and releasing vital enzymes and substances. The chapter also highlights how the speed of digestion impacts nutrient absorption and waste formation. Lastly, it touches on common causes of gastrointestinal disorders, including genetics, diet, substance use, and emotional health.	4 periods 195 minutes	(1) Describe the structures and functions of the digestive system. a. Describe the structures comprising the alimentary canal and their respective functions regarding the digestive process (pathway of food, digestion, nutrient absorption). i. Mouth: teeth, tongue, hard palate, soft palate ii. Pharynx iii. Esophagus iv. Cardiac/esophageal sphincter v. Stomach (include rugae) vi. Pyloric sphincter vii. Small intestine (include villi) 1. Duodenum 2. Ileum 3. Jejunum viii. Large intestine 1. Cecum 2. Ascending colon 3. Transverse colon 4. Descending colon 5. Sigmoid colon ix. Rectum x. Anus

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		b. Describe the accessory structures of the digestive system and their respective functions regarding the digestive process (pathway of food, digestion, nutrient absorption). i. Salivary glands ii. Pancreas iii. Liver iv. Appendix v. Gallbladder (2) Discuss diseases and disorders of the digestive system and related signs, symptoms, treatment, and prevention methods. a. Identify the general signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the digestive system. i. Appendicitis ii. Cholecystitis iii. Cirrhosis iv. Diverticulitis v. Gastric ulcer vi. GERD vii. Hepatitis type B (HBV) viii. Pancreatitis ix. Ulcerative colitis (3) Identify the basic structures and functions associated with the sensory organs.

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		a. Identify sensory organs' structures and describe their respective functions. i. Tongue: 1. Papillae
Unit 16: The Urinary System This chapter focuses on the urinary system and its essential role in maintaining the body's fluid and electrolyte balance while removing nitrogenous waste. You'll learn how urine is produced by the kidneys—complex organs made up of millions of nephrons that filter blood, reabsorb needed substances, and secrete waste. The process involves glomerular filtration, tubular reabsorption, and secretion, all regulated by hormones and blood pressure mechanisms. Urine then travels through the ureters to the bladder for storage and is eventually expelled through the urethra under both voluntary and reflex control. The chapter also examines the structure of the kidney, the importance of maintaining healthy filtration, and how kidney disease can impact not just renal function, but overall cardiovascular health. Treatments like dialysis and transplantation are also discussed as responses to advanced kidney failure.	3 periods 150 minutes	(1) Explain the structures and functions of the urinary system as they relate to the formation, composition, and elimination of urine. a. Identify urinary system structures and their respective functions. i. Bladder (include rugae) ii. Bowman's capsule iii. Cortex iv. Glomerulus v. Hilum vi. Kidneys vii. Medulla viii. Nephrons ix. Renal pelvis x. Ureters xi. Urethra xii. Urinary meatus (2) Discuss diseases and disorders of the urinary system and related causes, signs, symptoms, treatment, and prevention methods. a. Identify the general causes, signs, symptoms, treatment, and prevention methods associated with diseases of the urinary system.

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		i. Cystitis ii. Glomerulonephritis iii. Pyelonephritis iv. Renal calculus v. Renal failure b. Define disorders of the urinary system. i. Anuria ii. Dysuria iii. Hematuria iv. Incontinence v. Nocturia vi. Oliguria vii. Polyuria viii. Proteinuria ix. Pyuria x. Retention
Unit 17: The Reproductive System This chapter explores how the body reproduces and grows, beginning with asexual reproduction through mitosis, which allows tissues to grow and repair. In contrast, sexual reproduction requires specialized cells called gametes—eggs and sperm—produced through meiosis. The human life cycle begins with fertilization, when these gametes combine to form a zygote that develops	4 periods 190 minutes	(1) Discuss the structures and functions of the male and female reproductive systems. a. Identify the major structures of the male and female reproductive system and their respective functions. i. Male: 1. Ejaculatory ducts 2. Epididymis 3. Penis 4. Prostate gland

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
through multiple stages into a fully formed human. The chapter examines the structure and function of both the female and male reproductive systems, highlighting the hormonal control behind the female menstrual cycle and the production of sperm in males. Finally, it explains how hormones like estrogen, progesterone, and testosterone regulate reproductive processes and secondary sex characteristics.		5. Scrotum 6. Seminal vesicles 7. Testes 8. Urethra 9. Vas deferens ii. Female: 1. Breasts 2. Fallopian tubes 3. Ovaries 4. Perineum 5. Uterus: endometrium 6. Vagina 7. Vulva: mons pubis, labia majora, labia minora (2) Discuss diseases and disorders of the reproductive system and related signs, symptoms, treatment, and prevention methods. a. Identify the general signs, symptoms, treatment, and prevention methods associated with diseases and disorders of the reproductive systems. i. Breast cancer ii. Cervical cancer iii. Endometriosis iv. Ovarian cancer v. Prostate cancer vi. Prostatic hypertrophy vii. Testicular cancer

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		viii. Uterine cancer b. Identify the general signs, symptoms, treatment, and prevention methods associated with sexually transmitted infections (STIs). i. Chlamydia ii. Gonorrhea iii. Herpes iv. Human Papillomavirus v. Trichomoniasis
Unit 18: Basic Diagnostic Tests This chapter introduces the role of diagnostic testing in evaluating a patient's health and guiding medical decisions. These tests help identify conditions, monitor disease progression, assess treatment effectiveness, and predict outcomes. While no single test should be used in isolation, a variety of tools—from blood and urine analysis to imaging and monitoring devices—offer critical insights. You'll learn about common tests like complete blood counts, cultures, and urinalysis, as well as specialized procedures such as electrocardiograms, pulmonary function tests, and sleep studies. Together, these diagnostics form the foundation of accurate and informed patient care.	3 periods 125 minutes	(1) Research the impact of emerging technology on the digestive system. (2) Research the impact of emerging technology on the urinary system. (3) Research the impact of emerging technology on the lymphatic system. (4) Research the impact of emerging technology on the nervous system. (5) Research the impact of emerging technology on the endocrine system. (6) Research the impact of emerging technology on the sensory organs. (7) Research the impact of emerging technology on the reproductive system.

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
Unit 19: Anatomy and Physiology and the Scientific Method This chapter introduces the scientific method as a structured process for investigating natural and physical phenomena through observation, experimentation, and analysis. You'll learn how researchers form testable, refutable hypotheses and gather data to support or reject them. Scientific theories, while strongly supported by evidence, remain open to revision as new discoveries emerge. The chapter emphasizes the importance of using accurate and precise quantitative data, appropriate controls, and effective methods for presenting findings. It also acknowledges that while science plays a critical role in understanding the world, it is just one way of knowing and has its own limitations.	2 periods 80 minutes	
Unit 20: The Journey's End This chapter highlights the role of forensic science in solving both modern and historical crimes through the use of disciplines like anatomy, physiology, and DNA analysis. It then shifts focus to the aging population, noting that the ability to maintain homeostasis declines with age and that different body systems age at different rates.	2.5 periods 115 minutes	(1) Discuss diseases and disorders of the reproductive system and related signs, symptoms, treatment, and prevention methods. a. Identify the general signs, symptoms, treatment, and prevention methods associated with sexually transmitted infections (STIs). i. Syphilis

Course Name: Health Science Core 2 (995103)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
Special attention is given to how older adults respond to medications, especially in cases of polypharmacy. The chapter concludes by emphasizing the importance of personal health choices—such as proper nutrition, regular exercise, stress management, and avoiding harmful behaviors—as key strategies for aging well and reducing the risk of preventable diseases like cancer.		
Unit 21: Health Care: Careers and Career Planning This final chapter guides students in exploring the wide range of career opportunities in the health care field by encouraging self-reflection on personal interests, values, and abilities. Understanding these factors is essential for choosing a fulfilling career path. The chapter introduces key resources for researching occupations, outlines the education and skills needed for various roles, and emphasizes the importance of professional characteristics and ethical responsibilities. Students will also gain practical knowledge about job seeking, creating a career plan, and exploring volunteer experiences to help prepare for a future in health care.	2.5 periods 115 minutes	(1) Identify the basic structures and functions associated with the sensory organs.

Scope & Sequence – Pearson: Nursing Careers, ©2026

Course Name: CTE: Healthcare and Clinical Services (995105)	**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.

Course Description: *Nursing Careers* provides a comprehensive introduction to the nursing profession, covering its historical foundations, career pathways, and the essential skills required for success. The textbook guides students through the structure of the health care system, the role of nursing assistants, and the development of key employability, communication, and patient care skills. It emphasizes safety, legal and ethical responsibilities, and the importance of respecting individual needs across diverse patient populations. Students learn about vital signs, hygiene, nutrition, mobility, and procedures related to acute, subacute, and long-term care. The textbook also addresses specialized topics such as specimen collection, rehabilitation, and end-of-life care, offering practical knowledge for those pursuing a meaningful and compassionate career in nursing.

NOTE: This is a suggested scope and sequence for the course content.

Total Number of Periods **Total Number of Minutes** **Total Number of Hours**	X periods 7,875 minutes 131.25 hours*	*Schedule calculations based on 175/180 calendar days. Scope and sequence allows additional time for guest speakers, student presentations, field trips, remediation, extended learning activities, etc.
Unit Number, Title, and Brief Description	**# of Class Periods*** (assumes 45-minute periods) Total minutes per unit	**Standards**
Chapter 1: The History of Nursing This chapter provides an overview of the historical development of nursing, highlighting key events, individuals, and societal influences that shaped the profession. It traces how advancements in medical science and technology have transformed health care services and the role of nurses over time. The chapter also	55 minutes 1 period	

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
introduces the evolution of nursing education, including various training programs available to aspiring nurses. Finally, it outlines the four major areas of nursing science, emphasizing the academic and practical foundations of modern nursing practice.		
Chapter 2: Finding the Right Occupation for You This chapter introduces the Health Science career cluster and its five pathways, emphasizing that nursing falls under the Therapeutic Services pathway. It highlights the essential role of nursing assistants in helping patients with daily activities and notes the wide range of environments where they may work, from hospitals to home care. The chapter outlines the key personal traits that contribute to success in this field and explains how OBRA regulations help ensure quality training and care. It also reviews the various training options, certification routes, and potential career paths available to nursing assistants, while noting that further education and licensing can lead to advanced roles in the nursing profession.	70 minutes 2 periods	(1) UNIT 1: Course Orientation and Safety Review a. Review and complete proper procedures for clinical site visits as needed. i. Apply employability/career-readiness skills in healthcare. (2) UNIT 2: Employment Preparation and Embedded Work-Based Learning a. Research current available jobs across the healthcare field to develop a chart that compares specific elements. i. Compare specific employment elements. b. Identify the personal traits and attitudes desirable in a member of the career-ready healthcare team. i. Define and demonstrate desirable traits and attitudes of team members. ii. Summarize professional standards for hygiene, dress, language, confidentiality, verbal communication, and behavior.

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		(3) UNIT 5: Emergency Services and Basic Life Support a. Explore careers in the field of emergency services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information for various careers. (4) UNIT 8: Medical Services a. Explore the field of medical services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information for various careers. (5) UNIT 9: Nursing Services a. Explore the field of nursing services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information for various careers.
Chapter 3: Nursing and the Health Care System This chapter explores how the U.S. health care system is structured to address a range	75 minutes 2 periods	(1) UNIT 2: Employment Preparation and Embedded Work-Based Learning a. Research current available jobs across the healthcare field to develop a chart that compares specific elements.

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
of patient needs, including acute, subacute, long-term, and home care. It explains how health care organizations are designed to deliver these services effectively. The chapter also emphasizes the vital role of the nursing assistant within the broader nursing team. It highlights how nursing care plans are developed by registered nurses in collaboration with interdisciplinary teams, ensuring that all team members work together to support the patient's care goals.		(2) UNIT 5: Emergency Services and Basic Life Support a. Explore careers in the field of emergency services. (3) UNIT 9: Nursing Services a. Explore the field of nursing services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information for various careers. (4) UNIT 12: Healthcare Administration a. Identify factors that affect healthcare systems, the services that are performed, and the quality of care. i. Research and discuss the impact of emerging issues on healthcare delivery systems. ii. Review common healthcare payment methods. (5) UNIT 13: Mental Health Services a. Explore the field of mental health services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of various careers. (6) UNIT 18: Clinical Capstone Project

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		a. Students will research and learn about common diseases and disorders that affect human beings, including symptoms, causes, and treatments. i. Develop a fictional patient for the duration of the clinical capstone project, incorporating specific details and factors to characterize this individual.
Chapter 4: Developing Employability Skills This chapter focuses on the essential skills that employers seek when hiring and promoting employees across various career paths. It highlights the importance of decision-making, problem-solving, goal-setting, and time management as key components of professional success. The chapter also emphasizes effective communication as a vital skill in the workplace. By understanding and developing these abilities, students can prepare themselves for long-term success in nursing or any other chosen career.	65 minutes 1 period	(1) UNIT 1: Course Orientation and Safety Review a. Review and complete proper procedures for clinical site visits as needed. i. Apply employability/career-readiness skills in healthcare. (2) UNIT 12: Healthcare Administration a. Explore the field of health information management. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of various careers.
Chapter 5: Preparing for a Career This chapter outlines the steps and resources available to help students prepare for a career in the Health Sciences. It guides readers through identifying their interests,	75 minutes 2 periods	(3) UNIT 1: Course Orientation and Safety Review a. Review the health science student organization (HOSA). (4) UNIT 2: Employment Preparation and Embedded Work-Based Learning a. Through a real job search, analyze differences in online application requirements of various job postings.

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
values, and abilities, and explains how to create a career plan and develop key job search documents. The chapter also introduces professional resources such as HOSA and networking opportunities that can support career growth. Additionally, it covers job search strategies, interview preparation, and the importance of lifelong learning for continued professional success.		b. Research and select a real job advertisement. i. Develop a cover letter to fit the job advertisement using terminology that reflects the culture and values specific to that company or clinic. ii. Create a resumé with fabricated elements to fit the real job advertisement. c. Demonstrate real-world interview skills led by the instructor and/or external supervisors. i. Include certain skills in the real-world demonstration. d. Write customized thank-you letters to each member of the interview committee and send them using available methods of delivery. e. Develop components of a work-based learning personal portfolio. i. Create a student personal profile on the state-approved digital platform. ii. Develop and track the student project learning experiences. (5) UNIT 5: Emergency Services and Basic Life Support a. Perform skills obtained in training or certification for basic life support according to the latest information from the American Heart Association or American Red Cross. (6) UNIT 8: Medical Services a. Explore the field of medical services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work

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		environment, job responsibilities, and salary information for various careers.
Chapter 6: Skills for Professional Success This chapter explores the qualities and characteristics that define professionalism and contribute to workplace success. It emphasizes the importance of teamwork and leadership, along with strategies for recognizing and managing stress in professional settings. The chapter also highlights the growing role of technology in health care and how it supports effective communication within health care environments. Together, these skills prepare students to thrive in modern, fast-paced health care careers.	80 minutes 2 periods	(1) UNIT 1: Course Orientation and Safety Review a. Discuss leadership and personal development in accordance with HOSA guidelines. b. Review and complete proper procedures for clinical site visits as needed. i. Research and identify local facility requirements and complete various tasks. c. Review and demonstrate the proper safety procedures in the healthcare setting.
Chapter 7: Communication Skills for Nursing This chapter emphasizes the importance of strong communication and interpersonal skills in nursing. It introduces therapeutic communication as a framework for interacting effectively with patients, families, and coworkers. The chapter explains how body language should align with verbal messages and how interpreting others'	75 minutes 2 periods	

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
nonverbal cues is essential for clarity and empathy. It also explores common barriers to communication and highlights the difference between objective and subjective reporting, noting that accurate documentation must follow both general principles and organizational guidelines.		
Chapter 8: Relating to Your Patients This chapter focuses on understanding and respecting the individuality of patients by addressing their basic human needs and age-specific characteristics. It explains how care should be tailored to each patient's stage of life, noting that safety and comfort measures vary across age groups. The chapter also stresses the importance of extending this personalized approach to the patient's family. Additionally, it highlights the need to recognize and adapt to cultural and religious differences to ensure that care is both effective and respectful.	60 minutes 1 period	(1) UNIT 1: Course Orientation and Safety Review a. Review and complete proper procedures for clinical site visits as needed. i. Research and identify local facility requirements and complete various tasks. (2) UNIT 3: Human Growth and Development a. Discuss the stages of growth and development across the lifespan. i. Describe the four main types of growth and development (physical, mental, emotional, and social) that occur within the stages of life. b. Describe Maslow's hierarchy of human needs. i. Identify and define the levels of need in the proper order. ii. Discuss the importance of each level. c. Discuss methods of satisfying human needs. i. Differentiate between direct and indirect needs.

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
Chapter 9: Legal and Ethical Responsibilities of the Nursing Assistant This chapter emphasizes the importance of understanding and following the laws and ethical standards that govern health care. Nursing assistants must act within legal and ethical boundaries to protect the rights and well-being of both patients and coworkers. The chapter explains the need to be familiar with facility policies and outlines the resources available for reporting unethical or illegal behavior. It also introduces legal tools like living wills and health care powers of attorney that allow patients to make decisions about their end-of-life care.	65 minutes 1 period	(1) UNIT 1: Course Orientation and Safety Review a. Review and complete proper procedures for clinical site visits as needed. i. Research and identify local facility requirements and complete various tasks. b. Review and demonstrate the proper safety procedures in the healthcare setting. (2) UNIT 8: Medical Services a. Describe basic medical assistant concepts and procedures. i. Identify the concepts related to physical exams. ii. Apply proper procedure. (3) UNIT 12: Healthcare Administration a. Explore the field of health information management. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of various careers. b. Identify factors that affect healthcare systems, the services that are performed, and the quality of care. i. Describe the responsibilities of consumers within the healthcare system. (4) UNIT 18: Clinical Capstone Project

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		a. Students will research and learn about common diseases and disorders that affect human beings, including symptoms, causes, and treatments. i. Explore the five patient-centered steps in the patient care process and apply the process to the fictional patient by providing patient-centered care. ii. Apply the patient care process to the fictional patient by providing patient-centered care as applicable. iii. Report the outcome of the patient's problem in a mock scenario, illustrating the steps taken by the medical caretaker within a teacher-approved method. iv. Record the patient care process as needed in the state-approved digital portfolio.
Chapter 10: Infection Control This chapter explains how microorganisms cause disease and the vital role nursing assistants play in preventing the spread of infection. It stresses the importance of following facility policies and using protective measures like gloves, personal protective equipment (PPE), and proper hand hygiene. Alcohol-based hand sanitizers are highlighted as the preferred method in most cases, though soap and water are required when	130 minutes 3 periods	(1) UNIT 8: Medical Services a. Describe basic medical assistant concepts and procedures.

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visible contaminants are present. The chapter also covers isolation procedures for contagious diseases and the essential skills nursing assistants must develop for using PPE correctly and maintaining a safe care environment.		
Chapter 11: Environmental Safety, Accident Prevention, and Disaster Plans This chapter highlights the critical importance of safety in all aspects of patient care. Nursing assistants are responsible for protecting patients by responding quickly to call lights, using infection control practices, and maintaining proper body mechanics. The chapter outlines ways to prevent common hazards such as falls, burns, choking, and suffocation, and it stresses the need to understand restraint procedures. It also emphasizes the importance of fire safety, disaster preparedness, and participating in drills to ensure readiness in emergency situations.	85 minutes 2 periods	(1) UNIT 1: Course Orientation and Safety Review a. Review and demonstrate the proper safety procedures in the healthcare setting. i. Describe personal and environmental safety practices. ii. Identify common safety hazards. (2) UNIT 6: First Aid a. Describe the concepts for treating specific injuries. i. Identify the common injuries to specific body parts. ii. Apply proper treatment for specific injuries of the above body parts. b. Describe the concepts for treatment of poisoning.
Chapter 12: Emergency Situations This chapter focuses on the nursing assistant's responsibility to recognize and	80 minutes 2 periods	(1) UNIT 1: Course Orientation and Safety Review a. Review and demonstrate the proper safety procedures in the healthcare setting. i. Utilize emergency procedures and protocols.

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respond quickly to emergency situations. It emphasizes the importance of being prepared through training, since emergencies often require immediate action. CPR certification is a key requirement, and nursing assistants must also know how to use equipment like automated external defibrillators (AEDs) during cardiac arrest. The chapter also covers how to assist choking patients using abdominal thrusts or CPR, and highlights the skills needed to care for patients experiencing seizures.		(2) UNIT 5: Emergency Services and Basic Life Support a. Perform skills obtained in training or certification for basic life support according to the latest information from the American Heart Association or American Red Cross. i. Demonstrate the procedure for administering cardiopulmonary resuscitation (CPR) to infants, children, and adults. ii. Demonstrate the procedure for administering CPR using an automated external defibrillator (AED) for infants, children, and adults. iii. Demonstrate the procedure for removal of foreign-body airway obstruction for infants, children, and adults. (3) UNIT 6: First Aid a. Discuss and demonstrate the necessary skills to provide first aid treatment. i. Describe the basic principles of first aid. b. Describe and demonstrate the concepts for treatment of bleeding wounds and the application of dressing and bandages. i. Differentiate between arterial bleeding and venous bleeding. ii. Identify types of wounds. iii. Identify signs and symptoms of internal bleeding.

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		iv. Apply the proper procedure for treating a major and minor wound. c. Describe the concepts for treating shock. i. Differentiate between the types of shock. ii. Identify the general signs and symptoms of shock. d. Describe the concepts for treating injuries that result from exposure to extreme heat and cold. i. Differentiate between the types of heat/cold-related injuries/illnesses ii. Apply the proper procedure for treating a heat/cold-related illness. e. Describe the concepts for treating burns. i. Differentiate between the types of burns. ii. Apply the proper procedure for treating a burn. f. Describe the concepts for treating sudden illnesses. i. Differentiate between emergency conditions. ii. Apply the proper procedure treating the above sudden illnesses. g. In student groups, create scenarios and simulate any of the above first aid skills.
Chapter 13: Body Systems and Common Diseases This chapter provides an overview of how the human body is structured, beginning with cells that form tissues, which then form	265 minutes 6 periods	(1) UNIT 3: Human Growth and Development a. Discuss the stages of growth and development across the lifespan.

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
organs and body systems. Each system has a specific function that contributes to the body's overall balance, known as homeostasis. The chapter explains that disease occurs when this balance is disrupted, and that signs and symptoms help identify these changes. It also introduces various types of disease—acute or chronic, mental or physical—and connects common disorders to the specific body systems they affect.		i. Describe the four main types of growth and development (physical, mental, emotional, and social) that occur within the stages of life. b. Present on a topic related to the concepts of human growth and development. i. Research, develop, and deliver a presentation related to at least one of the topics in Competencies 1-3. (2) UNIT 6: First Aid a. Describe the concepts for treating skeletal injuries. i. Identify and describe fractures and dislocations. ii. Describe the following types of immobilization devices and their proper use: iii. Apply the proper procedure for treating a skeletal injury. (3) UNIT 9: Nursing Services a. Demonstrate basic nursing skills. i. Apply the proper procedures for the following: (4) UNIT 13: Mental Health Services a. Explore the field of mental health services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of various careers.

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
		b. Describe the basic concepts related to the field of mental health. i. Using resources from the National Alliance of Mental Illness (NAMI), differentiate between mental disorders. ii. Eating disorders iii. Research and identify forms of therapy. c. Discuss the correlation between mental health issues and negative responses to those issues. i. Using resources such as NAMI and the Mississippi Department of Mental Health, research and evaluate the current state and national data on various topics. ii. In a group setting, discuss the importance of the various topics below. (5) UNIT 16: Respiratory Care Services a. Explore the field of respiratory therapy. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information for various careers. b. Describe the basic concepts related to the field of respiratory therapy. i. Identify and provide the rationale for basic respiratory tests and procedures.

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		ii. Define medical conditions related to respiratory care. (6) UNIT 18: Clinical Capstone Project a. Students will research and learn about common diseases and disorders that affect human beings, including symptoms, causes, and treatments. i. Select a disease or disorder that will be tracked in the fictional patient. See the table below for common disease and disorder ideas.
Chapter 14: Vital Signs This chapter emphasizes the importance of accurately measuring a patient's vital signs to assess overall health and detect potential problems. It explains that the frequency of these measurements depends on the patient's condition and that any abnormal findings must be reported immediately. Nursing assistants must be skilled in using the correct instruments to ensure accuracy, including when measuring pain with appropriate pain scales. In addition to vital signs, height and weight are essential measurements that influence care plans and medication dosing, making the nursing assistant's precision and reliability crucial to patient care.	115 minutes 3 periods	(1) UNIT 7: Vital Signs a. Research key terms and concepts for recording vital signs. i. Define the key terms and concepts for recording vital signs. b. Identify expected normal ranges and the implications of each. i. Research and define the current normal range for adult blood pressure according to the American Heart Association. ii. Identify the expected normal ranges for adult pulse rate, oxygenation percentage, respiration rate, and temperatures. iii. Discuss the factors that cause variations in adult pulse rate, oxygenation percentage, respiratory rate, temperatures, and blood pressure.

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		c. Demonstrate proper procedures for measuring and recording vital signs according to HOSA standards. i. Measure and record oral, rectal, axillary, and tympanic temperatures accurately. ii. Measure and record apical and radial pulse to an accuracy of + 2 beats per minute. iii. Measure and record respirations to an accuracy of + 2 of instructor's count. iv. Measure and record blood pressure to an accuracy of + 2 millimeters of actual reading. (2) UNIT 8: Medical Services a. Describe basic medical assistant concepts and procedures. (3) UNIT 11: Medical Imaging Services a. Explore the field of medical imaging services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of various careers. b. Describe basic concepts and perform skills related to the field of medical imaging. i. Define specific medical imaging procedures. ii. Demonstrate basic radiological positioning, including posterior-anterior, anterior-posterior, lateral, and oblique.

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		(4) UNIT 16: Respiratory Care Services a. Describe the basic concepts related to the field of respiratory therapy. i. Identify and provide the rationale for basic respiratory tests and procedures. ii. Define medical conditions related to respiratory care.
Chapter 15: Positioning, Moving, and Ambulation This chapter highlights the importance of promoting movement, activity, and proper body alignment for all patients. It explains the use of specific techniques and positioning devices to ensure safety and comfort while patients are at rest or being transferred. Regular turning of patients is essential to prevent skin breakdown, especially over bony areas. The chapter also emphasizes maintaining patient privacy and comfort during transport and the correct use of ambulation equipment to prevent accidents and injuries.	105 minutes 2 periods	(1) UNIT 9: Nursing Services a. Demonstrate basic nursing skills. i. Apply the proper procedures for the following: (2) UNIT 15: Rehabilitative Services a. Demonstrate the proper procedures related to ambulation and assistive devices, according to HOSA standards. i. Apply the proper procedure for fitting a patient with crutches and giving instruction for a three-point gait. ii. Apply the proper procedure for ambulating a patient with a gait belt. iii. Apply procedure for fitting and ambulating a patient with a walker and cane.
Chapter 16: Admission, Transfer, and Discharge	50 minutes 1 period	

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
This chapter explains the nursing assistant's important role in creating a positive experience for patients during admission, transfer, and discharge. A caring attitude helps set the tone for a patient's stay, while following facility policies ensures safety and continuity of care. The chapter emphasizes the importance of tracking and documenting the patient's personal belongings throughout their stay. It also highlights the differences between acute and long-term care admissions, noting that long-term care patients often require emotional support to cope with loss and adjust to their new living environment.		
Chapter 17: The Patient's Environment This chapter focuses on creating and maintaining a patient environment that supports safety, independence, and personal preferences. It emphasizes the importance of cleanliness as a key component of quality care and the need to ensure patient privacy through the use of doors or curtains. The chapter also introduces different bedmaking techniques based on patient needs. Additionally, it stresses the use of proper body mechanics by nursing assistants to	55 minutes 1 period	(1) UNIT 9: Nursing Services a. Acting as a CNA in a role-play simulation, apply the proper procedure for morning care on a patient in an occupied bed, including recording vital signs and any two of the above skills.

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prevent injury while performing tasks like bedmaking.		
Chapter 18: Hygiene and Grooming This chapter covers the nursing assistant's role in supporting patients with hygiene and grooming as part of their daily care. It encourages promoting patient independence while ensuring privacy, dignity, and respect during all procedures. The chapter emphasizes safety and cleanliness during bathing, proper oral care, and the use of comfort techniques like back rubs to enhance circulation. Special attention is required when handling personal items such as dentures, hearing aids, and glasses, and wearing gloves during hygiene tasks is essential for infection control.	100 minutes 2 periods	(1) UNIT 9: Nursing Services a. Demonstrate basic nursing skills. i. Apply the proper procedures for the following: b. Acting as a CNA in a role-play simulation, apply the proper procedure for morning care on a patient in an occupied bed, including recording vital signs and any two of the above skills.
Chapter 19: Special Skin Care This chapter discusses the prevention and care of pressure injuries, which can affect any patient but are more common in those at higher risk. Nursing assistants are responsible for identifying at-risk patients and taking proactive measures to prevent skin breakdown. The chapter explains that	50 minutes 1 period	

Course Name: CTE: Healthcare and Clinical Services (995105)		**Course Credit:** 1.0 **Course Requirements:**. Grades 11-12. **Prerequisites:** None. **Recommended Prerequisites:** Click or tap here to enter text.
prolonged pressure, shearing, and friction are major causes of these injuries, and emphasizes the importance of keeping the skin clean and dry. It also introduces the use of special equipment designed to prevent or aid in the healing of pressure injuries.		
Chapter 20: Nutrition This chapter emphasizes the importance of proper nutrition for maintaining good health and highlights the various factors that influence food choices. It introduces the five food groups and explains how nursing assistants must be familiar with both general and therapeutic diets. In long-term care settings, residents may be given liberalized diets to enhance nutrition and quality of life. The chapter also covers the nursing assistant's responsibilities during mealtime, including feeding patients, offering snacks and fluids, tracking intake, and caring for patients who require feeding tubes.	75 minutes 2 periods	(1) UNIT 4: Nutrition and Dietetics a. Explore the field of nutrition and dietetic services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information for various careers. b. Describe the basic concepts and demonstrate skills related to the field of nutrition and dietetic services. i. Differentiate between the six essential nutrient groups: ii. Define the following therapeutic diets and associated medical conditions. c. Design a personal health meal plan utilizing online resources or applications.
Chapter 21: Elimination Needs This chapter explains the importance of the body's elimination process and the challenges some patients may face in	75 minutes 2 periods	

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managing their own toileting needs. It introduces various types of equipment used to assist patients who are weak or bedridden. The chapter also highlights two essential care procedures—perineal care and catheter care—that nursing assistants must learn to maintain patient hygiene, comfort, and health.		
Chapter 22: Specimen Collection and Testing This chapter introduces the reasons for collecting medical specimens and emphasizes the importance of following correct procedures to ensure accurate test results. Nursing assistants must be familiar with the proper collection techniques and use of specialized equipment. The chapter also reinforces the need to follow standard precautions at all times to maintain safety and prevent contamination during specimen collection.	50 minutes 1 period	(1) UNIT 10: Laboratory Services a. Explore the field of laboratory services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of various careers. b. Describe the basic concepts and skills of laboratory services. i. Define basic laboratory diagnostic tests. ii. Describe methods of collecting various specimens.
Chapter 23: AM and PM Care This chapter focuses on the importance of rest and sleep for a patient's physical and mental health. It highlights the nursing assistant's key role in supporting patients'	30 minutes 1 period	

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rest needs during both day and night. The chapter also emphasizes that each patient has unique sleep patterns shaped by their personal history, work habits, and family routines, which must be respected and accommodated in their care.		
Chapter 24: Restorative Care and Rehabilitation This chapter explains how illness, injury, surgery, or extended inactivity can lead to a loss of body function. It introduces restorative care as a method of helping patients regain and maintain their health and independence. The chapter also distinguishes rehabilitation as a more intensive process aimed at achieving the highest possible level of functioning for each patient.	70 minutes 2 periods	(1) UNIT 15: Rehabilitative Services a. Explore the field of rehabilitative services. i. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information for various careers. b. Describe and demonstrate the basic concepts of range of motion (ROM). i. Differentiate between active and passive ROM. ii. Identify basic terminology related to ROM. iii. Demonstrate the proper procedure passive range of motion (PROM) for one knee, one ankle, and one shoulder.
Chapter 25: Additional Patient Care Procedures This chapter covers supplemental care procedures such as the use of heat and cold treatments to relieve pain. It emphasizes the	75 minutes 2 periods	(1) UNIT 8: Medical Services a. Describe basic medical assistant concepts and procedures. i. Identify the concepts related to physical exams. ii. Apply proper procedure. (2) UNIT 11: Medical Imaging Services

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importance of applying these treatments safely and appropriately. The chapter also outlines the nursing assistant's responsibilities before, during, and after patient examinations. Additionally, it notes that special procedures must always be performed under the direct supervision of a licensed nurse to ensure patient safety.		a. Describe basic concepts and perform skills related to the field of medical imaging. i. Define specific medical imaging procedures. ii. Demonstrate basic radiological positioning, including posterior-anterior, anterior-posterior, lateral, and oblique. (3) UNIT 18: Clinical Capstone Project a. Students will research and learn about common diseases and disorders that affect human beings, including symptoms, causes, and treatments. i. Record the patient care process as needed in the state-approved digital portfolio.
Chapter 26: Preoperative and Postoperative Care This chapter introduces the nursing assistant's role in caring for surgical patients, with a focus on both preoperative and postoperative care. It emphasizes the importance of addressing patients' physical and emotional needs before surgery to promote comfort and reduce anxiety. After surgery, safety becomes the top priority, with frequent repositioning, gradual movement, and close observation being essential to prevent complications. The chapter also highlights the need for early ambulation and	60 minutes 1 period	(1) UNIT 16: Respiratory Care Services a. Describe the basic concepts related to the field of respiratory therapy.

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exercise to reduce the risk of blood clots and aid in recovery.		
Chapter 27: Subacute Care This chapter explains subacute care, also called transitional care, which provides a bridge between hospital and home for patients needing continued but complex medical attention. These patients often require services such as IV therapy, ventilator support, and ongoing rehabilitation. Nursing assistants working in subacute settings must have advanced skills to manage patients connected to multiple devices and treatments. The chapter also emphasizes the importance of accurate documentation, both for patient progress and insurance purposes, and highlights the nursing assistant's role as part of the interdisciplinary care team.	45 minutes 1 period	(1) UNIT 7: Vital Signs a. Research key terms and concepts for recording vital signs. i. Define the key terms and concepts for recording vital signs. b. Identify expected normal ranges and the implications of each. i. Research and define the current normal range for adult blood pressure according to the American Heart Association. ii. Identify the expected normal ranges for adult pulse rate, oxygenation percentage, respiration rate, and temperatures. iii. Discuss the factors that cause variations in adult pulse rate, oxygenation percentage, respiratory rate, temperatures, and blood pressure. c. Demonstrate proper procedures for measuring and recording vital signs according to HOSA standards. i. Measure and record oral, rectal, axillary, and tympanic temperatures accurately. ii. Measure and record apical and radial pulse to an accuracy of + 2 beats per minute.

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		iii. Measure and record respirations to an accuracy of + 2 of instructor's count. iv. Measure and record blood pressure to an accuracy of + 2 millimeters of actual reading.
Chapter 28: Special Skills in Long-Term Care This chapter explores the specialized skills nursing assistants need when caring for residents in long-term care facilities. These facilities serve individuals of all ages with chronic illnesses or permanent disabilities, though most residents are elderly. Nursing assistants must understand and adapt to residents' physical and cognitive limitations while respecting their cultural, emotional, and spiritual needs. The chapter also highlights the importance of family support and introduces communication techniques for working with residents who have cognitive impairments, including those with dementia or Alzheimer's disease.	100 minutes 2 periods	(1) UNIT 13: Mental Health Services a. Describe the basic concepts related to the field of mental health. i. Research and identify forms of therapy. b. Discuss the correlation between mental health issues and negative responses to those issues. i. Using resources such as NAMI and the Mississippi Department of Mental Health, research and evaluate the current state and national data on various topics. ii. In a group setting, discuss the importance of the various topics below.
Chapter 29: Death and Dying This chapter addresses the emotional and practical aspects of caring for dying patients and their families. It emphasizes the nursing assistant's role in providing compassionate, person-centered support during this difficult	55 minutes 1 period	(1) UNIT 3: Human Growth and Development a. Explain the concepts related to death and dying. i. Describe Dr. Kubler Ross's five stages of grief.

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time. The chapter explores key concepts such as advance directives, hospice care, and organ or tissue donation. It also explains how to recognize the physical signs of approaching death and outlines the procedures for both care at the time of death and postmortem care.		

Standards Correlations

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Unit 1: Orientation and Introduction to Student	
Organizations	
Competencies and Suggested Objectives	
1. Describe the purpose of the course and related student organizations. DOK1	
a. Identify student and course expectations.	n/a
b. Explore the health science student organization, HOSA.	p. 92
• Describe parliamentary procedures.	p. 92
• Discuss officer roles and responsibilities.	p. 92
c. Discuss leadership and personal development in accordance with HOSA guidelines.	p. 92
Unit 2: Safety in Health Care	
Competencies and Suggested Objectives	
1. Demonstrate personal and environmental safety practices.	pp. 506-515
a. Apply principles of body mechanics.	p. 529
b. Based on regulations set by the Occupational Safety and Health Association (OSHA and the Center for Disease Control and Prevention (CDC), apply safety techniques (personal and patient) in the health care setting to prevent accidents and injuries.	p. 515
2. Identify common safety hazards. DOK2	p. 20; 115; 122
a. Comply with safety signs, symbols, and labels in accordance with OSHA and the CDC.	p. 515
b. Recognize Safety Data Sheets (SDS) and discuss safety implications of handling hazardous materials (checking labels and	p. 748
3. Utilize emergency procedures and protocols. DOK3	p. 543
a. Practice fire safety and discuss fire evacuation plans in a health care setting. Include the following:	p. 522; 767
• PASS – Pull, Aim, Squeeze, Sweep	p. 524
• RACE – Rescue, Activate, Contain, Extinguish/Evacuate	p. 524
b. Apply principles of basic emergency response in natural	
• Safe location	p. 524
• Contact emergency personnel	p. 524
• Follow facility protocols	p. 524
Unit 3: Career Preparation	
Competencies and Suggested Objectives	
1. Explore various careers in the health care field. DOK2	pp. 46-52
a. Choose at least three specific careers from the list created in	pp. 67-68
b. Research the educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of each one.	p. 68

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c. Based on research, develop a presentation explaining the three careers and why they were chosen	p. 68
2. Utilize the approved method of clinical hour documentation (e.g., AET or other state approved method of documentation).	pp. 832-833
3. Explore the various career options in the health care field.	p. 51
a. Research and list various career options.	p. 44
• Emergency services	p. 55; 67
• Respiratory care	p. 67
• Human growth and development	pp. 394-401
• Sports medicine	p. 324; pp. 771-774
• Rehabilitative services	p. 413; pp. 799-801
• Medical services	p. 53; 63
• Nursing services	p. 67
• Nutrition and dietetics	pp. 347-353
• Mental health	p. 438
• Pharmacology	p.742
• Laboratory services	p. 58; 701; 743
• Medical imaging	p. 59
• Health information management	pp. 61-62
4. Relate the importance of lifelong learning to career success.	
a. Consider emergent technology (e.g., artificial intelligence, automation, telehealth, robotics, etc.).	p. 67
b. Develop an oral and/or written report explaining the importance of lifelong learning in maintaining career relevance	p. 67
Enrichment	
1. Conduct practice interviews or answer a list of possible interview questions.	p. 82
2. Conduct a personality test or review previous results to facilitate discussion ofindividualized careers.individualized careers.	p. 44
Unit 4: Health Care Delivery Systems	
Competencies and Suggested Objectives	
1. Research and discuss health care delivery systems and health organizations. DOK1	p. 28
a. Differentiate between health care delivery systems, including nonprofit and for-profit facilities	pp. 28-37
• Hospitals	p. 36
• Ambulatory/outpatient clinics	p. 36
• Long-term care	p. 36
• Home health	p. 36
• Medical and dental offices	p. 36
• Behavioral and mental health services	p. 36

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• Public health	p. 36
b. Identify health organizations and their respective roles.	pp. 40-41; 92
• Government:	
o Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), U.S. Food and Drug Administration (FDA), National Institute of Health (NIH),	p. 32; 829
• Nonprofit organizations:	p. 32; 829
o March of Dimes, American Heart Association, American Diabetes Association, American Red Cross, Alzheimer's Association, American Lung Assoc	p. 14; 33; 530
• Global:	
o World Health Organization (WHO)	p. 31
2. Relate the importance of lifelong learning to career success.	p. 31
a. Considering 21st-century emergent technology (e.g., artificial intelligence, automation,telehealth, robotics, etc.).	p. 12; 26; 91
b. Develop an oral and/or written report explaining the importance of lifelong learning inmaintaining career relevance and	p. 12; 26; 92
Unit 5: Infection Awareness and Prevention	
Competencies and Suggested Objectives	
1. Explain the principles of infection control. DOK1	pp. 467-470; 479
a. Research and explain:	
• Chain of infection	p. 473
• Mode of transmission: direct, indirect, vectors, common vehicle (air, food, water), health care associated infections (nosocomial), opportunistic.	pp. 497-500
• Types of infections: endogenous, exogenous	p. 472
• Microorganisms: nonpathogenic, pathogenic, aerobic, anaerobic	pp. 469-470
b. Classify the following microorganisms and diseases:	pp. 476-488
• Bacterial:	pp. 476-488
o Meningitis	pp. 476-488
o Methicillin-resistant staphylococcus	pp. 476-488
o Pertussis	pp. 476-488
o Pneumonia	pp. 476-488
o Strep throat	pp. 476-488
o Tetanus	pp. 476-488
o Tuberculosis	pp. 476-488
• Fungal:	pp. 476-488
o Athlete's foot	pp. 476-488
o Histoplasmosis	pp. 476-488
o Ring Worm	pp. 476-488

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o Thrush	pp. 476-488
o Yeast vaginitis	pp. 476-488
• Parasites (Helminths):	pp. 476-488
o Hook worms or flukes	pp. 476-488
o Pin worms	pp. 476-488
o Tape worms	pp. 476-488
• Parasites (Rickettsia):	pp. 476-488
o Rocky Mountain spotted fever	pp. 476-488
o Typhus fever	pp. 476-488
• Protozoa:	pp. 476-488
o Amebic dysentery	pp. 476-488
o Malaria	pp. 476-488
• Viruses:	pp. 476-488
o Chicken pox	pp. 476-488
o Covid 19	pp. 476-488
o Common cold	pp. 476-488
o Hepatitis (A, B, C)	pp. 476-488
o Herpes	pp. 476-488
o HIV	pp. 476-488
o Influenza (seasonal, H1N1, H5N1)	pp. 476-488
o Measles	pp. 476-488
o Mumps	pp. 476-488
o Polio	pp. 476-488
o RSV	pp. 476-488
o Warts	pp. 476-488
o West Nile virus (WNV)	pp. 476-488
c. Identify the levels of aseptic control.	pp. 476-488
• Antisepsis	pp. 476-488
• Disinfection	pp. 476-488
• Sterilization	pp. 476-488
d. Demonstrate the proper procedure for aseptic hand washing according to the CDC.	p. 476
2. Explain standard precaution based on OSHA and CDC	p. 477
a. Describe OSHA's blood-borne pathogen standards.	p. 502
b. Explore employer requirements according to the Needle Stick Safety and Prevention Act	p. 477
c. Demonstrate the basic rules of standard precaution.	p. 759
3. Utilize the principles of sterile technique. DOK3	p. 759
a. Demonstrate skills related to sterile technique.	p. 759
• Donning sterile gloves	p. 494
• Sterile dressing	p. 496

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• Maintaining a sterile field	p. 496
• Wrapping instruments for sterilization	p. 485
4. Explain the importance of maintaining transmission-based isolation precautions. DOK3	p. 487
a. Identify and explain the types of isolation precautions needed to prevent the spread of communicable diseases	p. 487-497
• Airborne	p. 497
• Droplet	p. 497
• Contact	p. 497
• Reverse/protective	p. 497
b. Demonstrate the proper procedure, according to the CDC, for donning and doffing personal protective equipment (PPE).	pp. 483-486
• Gowns	pp. 483-486
• Masks	pp. 483-486
• Goggles	pp. 483-486
• Gloves	pp. 483-486
5. Research the impact of emerging technology on infection	
Enrichment	
1. Discuss other prevalent or interesting diseases/infections,	pp. 476-477
• Ebola/Marburg	p. 476
• Zika virus	p. 476
• Lyme disease	p. 476
2. Research and describe the following vaccinations and diseases they prevent:	p. 502
• Covid 19	p. 502
• DTaP	p. 502
• Hep B	p. 502
• HPV	p. 502
• Influenza	p. 502
• Meningitis	p. 502
• MMR	p. 502
• Monkey Pox	p. 502
• Polio	p. 502
• Shingles	p. 502
• Smallpox	p. 502
• Varicella	p. 502
3. Based on the research on vaccinations, facilitate a student led debate on the importance of vaccinations.	p. 502
4. Investigate and apply the principles in the junior disease detective guide. (See link to guide in teacher resource guide.)	n/a
Unit 6: Legal and Ethical Practices in Health Care	

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Competencies and Suggested Objectives	
1. Analyze legal responsibilities and implications of criminal and civil law. DOK1	pp. 99-105
a. Define and discuss torts in relation to health care.	
• Malpractice	pp. 111-112
• Negligence	p. 114
• Assault and battery	p. 113
• Invasion of privacy	p. 114
• Abuse	p. 107
• Defamation of character (libel, slander)	p. 113
• False imprisonment	p. 114
2. Describe and demonstrate legal practices associated with health care. DOK2	
a. Apply the standards for safety, privacy, and confidentiality of health information, including topics such as the Health Insurance Portability and Accountability Act andprivileged communications	p. 111
b. Describe advance directives, including topics such as living wills and durable power of attorney.	p. 111
c. Define types of consent/contracts, including informed consent, implied contracts, andexpressed contracts.	p. 111
d. Research and discuss the meaning of scope of practice.	p. 115
3. Utilize procedures for reporting activities and behaviors that affect the health, safety, and the welfare of others. DOK2	
a. Discuss the chain of command for reporting issues.	pp. 28-35
b. Complete an incident report.	p. 767
4. Recognize and discuss ethical boundaries within the health care environment. DOK3	p. 126; 502
a. Differentiate between ethical and legal issues impacting	p. 126; 502
b. Identify and explain ethical dilemmas associated with organ donation, invitrofertilization, euthanasia, stem cell research, and	p. 126; 420
5. Identify cultural, social, and ethnic diversity within the health care environment. DOK3	pp. 170-177
a. Compare religious, spiritual, and cultural—including ethnicity, race, religion, andgender—values as they impact health care.	p. 100, 122
b. Within a role-play situation, demonstrate respectful and empathetic treatment of all patients and clients.	p. 24; 181
Enrichment	
1. Use with Competency 2:	

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a. Summarize the American Hospital Association's Patient Care Partnership (for acutecare, formerly known as Patient's Bill of Rights) and the Resident's Bill of Rights (forlong-term care).	pp. 100-103
b. Discuss scenarios and laws concerning various types of harassment/violence in the workplace	pp. 113-114
2. Use with Competency 4:	
a. After completing each objective, facilitate a student led debate on one or multiple ofthe topics listed in the competency.	p. 17; 109
Unit 7: Communication and Teamwork	
Competencies and Suggested Objectives	
1. Describe the concepts of effective communication. DOK2	p. 167
a. Interpret verbal and nonverbal communication.	p. 194
b. Recognize barriers to communication, including physical disabilities (aphasia, hearing loss, impaired vision), psychological barriers (attitudes, bias, prejudice, stereotypes), language barriers.	p. 194
c. Differentiate subjective and objective information.	p. 214
d. Recognize the elements of communication using a sender-receiver model.	p. 198
e. Demonstrate speaking and active listening skills.	p. 194
f. Demonstrate elements of proper written and electronic communication (e.g., spelling, grammar, and formatting).	pp. 53-55
2. Compare the roles and responsibilities of individual members as part of the health care team. DOK2	
a. Describe roles and responsibilities of team members.	p. 180
• Examples of health care teams in a hospital and clinic setting.	p. 82; 89-90
• Responsibilities of team members	pp. 86-91
• Benefits of teamwork	p. 84
b. Recognize and demonstrate characteristics of effective	p. 173; 193
• Active participation	p. 173
• Cultural humility	p. 173
• Reliability	p. 173; 193
• Civility	p. 173; 193
• Flexibility	p. 173; 193
• Trust	p. 173; 193
• Commitment	p. 173; 193
• Open to feedback	p. 173; 193
• Collaboration	p. 173; 193
• Positive attitude	p. 173; 193

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3. Explain the principles of interacting effectively and sensitively with all members of the health care team. DOK3	pp. 193-194
a. Recognize methods for building positive team relationships, including mentorships and teambuilding	p. 75; 94
b. Analyze attributes and attitudes of an effective leader.	pp. 89-90
• Characteristics: interpersonal skills, focused on results, positive	p. 90
• Types: autocratic, democratic, laissez-faire	p. 91; 177
• Roles: sets vision, leads change, manages accountability	pp. 91-92
c. Apply effective techniques for managing team conflict.	p. 180
• Negotiation	p. 180
• Clear expectations	p. 194
• Assertive communication	p. 194
• Mediation	p. 180
• Gather the facts	p. 179
Unit 8: Medical Terminology and Abbreviations	
Competencies and Suggested Objectives	
1. Introduce appropriate medical terminology and abbreviations as found in Appendix C. DOK1	pp. 235-239
a. Use roots, prefixes, and suffixes to communicate	p. 245
b. Use medical abbreviations to communicate information.	p. 246
Unit 9: Body Organization	
Competencies and Suggested Objectives	
1. Describe the basic organization of the body. DOK1	
a. Identify the basic levels of organization of the human body.	
• Chemical	p. 302
• Cellular	p. 336
• Tissue	p. 888
• Organs	p. 339
• Systems	pp. 308; 339-354
• Organism	p. 308
2. Discuss the tissue organization of the body. DOK1	
a. Identify the four major categories of tissues and their respective locations, structures,and basic functions.	pp. 308-309
• Nerve	pp. 308-309
• Epithelium	pp. 308-309
• Muscle (cardiac, smooth, skeletal)	pp. 308-309
• Connective (ligaments, tendons, facia)	pp. 308-309
3. Identify the body planes, directional terms, cavities, quadrants, and regions. DOK1	
a. Body planes: sagittal, midsagittal, coronal/frontal,	p. 308

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b. Directional terms: superior, inferior, anterior/ventral, posterior/dorsal, medial, lateral, proximal, distal, superficial, deep,	p. 308
c. Cavities: dorsal, cranial, nasal, oral, orbital, spinal, thoracic, abdominal, pelvic	pp. 308-309
d. Quadrants: upper right, lower right, upper left, lower left	pp. 308-309
e. Regions: Right/left hypochondriac, right/left lumbar, right/left iliac, epigastric,umbilical, hypogastric	pp. 308-309
Unit 10: Integumentary System	
Competencies and Suggested Objectives	
1. Discuss the structures and functions of the integumentary	pp. 380-384
a. Identify the parts comprising the integumentary system and their respective functions.	pp. 380-384
• Layers: epidermis, dermis, subcutaneous	p. 384
• Structures: sudoriferous glands, sebaceous glands, hair follicles, hair shaft	p. 384
• Functions: protection, sensory perception, temperature regulation (vasodilation, vasoconstriction), storage, absorption, excretion, production	p. 384
b. Define and discuss pigmentation and related topics.	p. 363
• Melanin	
• Carotene	
• Albino	
c. Define and discuss skin discoloration and related topics:	
• Erythema	p. 384
• Jaundice	p. 384
• Cyanosis	p. 384
2. Explain diseases and disorders of the integumentary system and related signs, symptoms,treatment, and prevention methods.	
a. Identify the general signs, symptoms, treatment, and prevention methods associatedwith diseases and disorders of the	p. 384
• Acne vulgaris	p. 384
• Athlete’s foot	p. 384
• Basal cell carcinoma	p. 384
• Dermatitis	p. 384
• Eczema	p. 384
• Impetigo	p. 384
• Melanoma	p. 384
• Psoriasis	p. 384
• Ringworm	p. 384
• Squamous cell carcinoma	p. 384
• Verrucae	p. 384

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b. Describe various skin eruptions.	
• Crusts	n/a
• Cysts	n/a
• Macules	n/a
• Papules	n/a
• Pustules	n/a
• Ulcers	n/a
• Vesicles	n/a
• Wheals	n/a
3. Research the impact of emerging technology on the integumentary system. DOK3	p. 384
Unit 11: Skeletal System	
Competencies and Suggested Objectives	
1. Compare the structures and functions of the skeletal system with its relationship to movement. DOK1	
a. Identify the axial and appendicular bones.	p. 318
b. Identify the parts of a bone.	p. 309
• Diaphysis	p. 309
• Endosteum	p. 309
• Epiphysis	p. 309
• Medullary canal	p. 309
• Periosteum	p. 309
• Red marrow	p. 309
• Yellow marrow	
c. Explain the functions of the skeletal system.	p. 311
• Framework	p. 311
• Protection	p. 311
• Levers	p. 311
• Production of blood cells	p. 311
• Storage	p. 311
d. Identify the types of joints and their related movements.	
• Diarthrosis or synovial	p. 318
• Amphiarthrosis	p. 318
• Synarthrosis	p. 318
2. Discuss diseases and disorders of the skeletal system and related signs, symptoms, treatment, and prevention methods.	p. 318
a. Identify the general signs, symptoms, treatment, and prevention methods associated with skeletal diseases, disorders,	p. 318
• Bursitis	p. 318
• Osteomyelitis	p. 318
• Osteoporosis	p. 318

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• Osteoarthritis	p. 318
• Rheumatoid arthritis	p. 318
• Sprain	p. 318
• Ruptured disk	p. 318
• Dislocation	p. 318
• Spinal curvatures: scoliosis, lordosis, and kyphosis	p. 318
• Fractures: stress, comminuted, compound or open, simple or closed, depressed, green stick, impacted, spiral	p. 318
3. Research the impact of emerging technology on the skeletal system. DOK3	p. 318
Unit 12: Muscular System	
Competencies and Suggested Objectives	
1. Compare the structures and functions of the muscular system with its relationship to movement. DOK1	
a. Identify the three types of muscle.	p. 319
• Cardiac	p. 324-325
• Visceral/smooth	p. 324-325
• Skeletal	p. 324-325
b. Define the characteristics of skeletal muscle.	
• Excitability	
• Contractibility	p. 318-325
• Extensibility	p. 318-325
• Elasticity	p. 318-325
c. Identify major skeletal muscles.	
• Biceps brachii	p. 888
• Deltoid	p. 888
• Gastrocnemius	p. 888
• Gluteus maximus	p. 888
• Intercostals	p. 888
• Latissimus dorsi	p. 888
• Pectoralis major	p. 888
• Quadriceps femoris	p. 888
• Rectus abdominis	p. 888
• Sartorius	p. 888
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• Diencephalon: thalamus, hypothalamus	p. 273
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a. Differentiate between endocrine and exocrine.	p. 267
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Pituitary (Anterior Lobe) ACTH-adrenocorticotropic Stimulates growth and secretion of the cortex of the adrenal gland	p. 273
TSH-thyrotropin Stimulates growth and secretion of the thyroid gland	p. 273
GH-somatotropin Growth hormone; stimulates normal body growth	p. 276, p. 277
Pituitary (Posterior Lobe) ADH-vasopressin Antidiuretic hormone; promotes reabsorption of water in kidneys, constricts blood vessels	p. 276, p. 277

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metabolic rate; stimulate physical and mental growth; regulate metabolism of carbohydrates, fats, and proteins	p. 277
Adrenal (Cortex) Glucocorticoids:	p. 283
• Cortisol-hydrocortisone	p. 285
• Cortisone	p. 794
carbohydrates; increase amount of glucose in blood; provide resistance to stress; depress immune response (anti-inflammatory)	p. 285
Gonadocorticoids:	NA
• Estrogens	NA
• Androgens	NA
Act as sex hormones	p. 286
• Stimulate female sexual characteristics	p. 286
• Stimulate male sexual characteristics	p. 286
Activates sympathetic nervous system; acts in times of stress to increase cardiac output and increase blood pressure	p. 281
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Pancreas	p. 281
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• Cushing's syndrome	p. 677
• Diabetes mellitus (Type 1 and 2)	p. 678
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o Choroid coat	pp. 297-300
o Conjunctiva	pp. 297-300
o Cornea	pp. 297-300
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organs.	p. 297, p. 303, pp. 309-310
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• Otitis externa	pp. 309-310
• Otitis media	pp. 309-310
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o Prostate gland	p. 526
o Scrotum	p. 526
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o Breasts	p. 523
o Fallopian tubes	p. 514, p. 520
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2. Discuss diseases and disorders of the reproductive system and related signs, symptoms, treatment, and prevention methods.	pp. 531-532

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• Prostatic hypertrophy	NA
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3. Review and demonstrate the proper safety procedures in the healthcare setting.	p. 79, p. 82, p. 117
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b. Identify common safety hazards.	p. 151
c. Utilize emergency procedures and protocols.	pp. 168-169
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4. Identify the personal traits and attitudes desirable in a member of the career-ready healthcare team.	p. 22
a. Define and demonstrate desirable traits and attitudes of team members.	p. 22

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5. Demonstrate real-world interview skills led by the instructor and/or external supervisors.	p. 63
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b. Apply the proper procedure for treating a burn.	p. 172
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b. Apply the proper procedure treating the above sudden illnesses.	p. 178, p. 210
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a. Identify the common injuries to specific body parts.	p. 155, p. 176
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a. Research and define the current normal range for adult blood pressure according to the American Heart Association.	pp. 237-254, p. 423
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3. Demonstrate proper procedures for measuring and recording vital signs according to HOSA standards.	pp. 237-254, p. 423
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b. Measure and record apical and radial pulse to an accuracy of + 2 beats per minute.	pp. 237-254, p. 423
c. Measure and record respirations to an accuracy of + 2 of instructor's count.	pp. 237-254, p. 423
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2. Describe basic medical assistant concepts and procedures.	p. 135, p. 138, pp. 244-245
b. Identify the concepts related to physical exams.	p. 116, p. 397
c. Apply proper procedure.	p. 116, p. 397

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2. Demonstrate basic nursing skills.	p. 184, p. 262, p. 317
a. Apply the proper procedures for the following:	p. 184, p. 262, p. 317
3. Acting as a CNA in a role-play simulation, apply the proper procedure for morning care on a patient in an occupied bed, including recording vital signs and any two of the above skills.	p. 290, p. 313
UNIT 10: Laboratory Services	
1. Explore the field of laboratory services.	pp. 361-363
a. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of various careers.	pp. 361-363
2. Describe the basic concepts and skills of laboratory services.	pp. 361-363
a. Define basic laboratory diagnostic tests.	pp. 361-363
b. Describe methods of collecting various specimens.	pp. 361-363
UNIT 11: Medical Imaging Services	
1. Explore the field of medical imaging services.	p. 256
a. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of various careers.	p. 256
2. Describe basic concepts and perform skills related to the field of medical imaging.	p. 256, p. 397
a. Define specific medical imaging procedures.	p. 256, p. 397
b. Demonstrate basic radiological positioning, including posterior-anterior, anterior-posterior, lateral, and oblique.	p. 256, p. 397

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1. Explore the field of health information management.	p. 42, p. 115
a. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of various careers.	p. 42, p. 115
2. Identify factors that affect healthcare systems, the services that are performed, and the quality of care.	pp. 32-33, p. 37
a. Research and discuss the impact of emerging issues on healthcare delivery systems.	pp. 32-33, p. 37
b. Review common healthcare payment methods.	pp. 32-33, p. 37
c. Describe the responsibilities of consumers within the healthcare system.	p. 116, p. 121
UNIT 13: Mental Health Services	
1. Explore the field of mental health services.	p. 213
a. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information of various careers.	p. 35, p. 118, p. 213
2. Describe the basic concepts related to the field of mental health.	pp. 213-216
a. Using resources from the National Alliance of Mental IIlness (NAMI), differentiate between mental disorders.	pp. 213-216
Eating disorders	
b. Research and identify forms of therapy.	pp. 213-216, p. 442
3. Discuss the correlation between mental health issues and negative responses to those issues.	pp. 213-216, p. 442
a. Using resources such as NAMI and the Mississippi Department of Mental Health, research and evaluate the current state and national data on various topics.	pp. 213-216, p. 442
b. In a group setting, discuss the importance of the various topics below.	pp. 213-216, p. 442
UNIT 14: Sports Medicine	
1. Explore the field of sports medicine.	NA

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a. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information for various careers.	NA
2. Describe the basic concepts of assessment in sports medicine.	NA
a. Identify the components of a sports physical.	NA
b. Discuss the use of SOAP notes in injury assessment.	NA
c. Differentiate between the following types of body fat assessment techniques.	NA
3. Analyze and apply basic injury treatment modalities in sports medicine.	NA
a. Identify the following components of PRICE.	NA
b. Define terms and discuss the importance of vasodilation and vasoconstriction, each in relation to cold/heat application.	NA
c. Apply the proper procedure for applying heat and cold to injuries.	NA
UNIT 15: Rehabilitative Services	
1. Explore the field of rehabilitative services.	pp. 376-380
a. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information for various careers.	pp. 376-380
2. Describe and demonstrate the basic concepts of range of motion (ROM).	pp. 382-384
a. Differentiate between active and passive ROM.	pp. 382-384
b. Identify basic terminology related to ROM.	pp. 382-384
c. Demonstrate the proper procedure passive range of motion (PROM) for one knee, one ankle, and one shoulder.	pp. 382-384
3. Demonstrate the proper procedures related to ambulation and assistive devices, according to HOSA standards.	p. 260, pp. 275-279
a. Apply the proper procedure for fitting a patient with crutches and giving instruction for a three-point gait.	p. 260, pp. 275-279

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b. Apply the proper procedure for ambulating a patient with a gait belt.	p. 260, pp. 275-279
c. Apply procedure for fitting and ambulating a patient with a walker and cane.	p. 260, pp. 275-279
UNIT 16: Respiratory Care Services	
1. Explore the field of respiratory therapy.	pp. 191-192
a. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information for various careers.	pp. 191-192
2. Describe the basic concepts related to the field of respiratory therapy.	p. 414
a. Identify and provide the rationale for basic respiratory tests and procedures.	p. 161, p. 191, p. 249
b. Define medical conditions related to respiratory care.	p. 161, p. 191, p. 249
UNIT 17: Pharmacology	
1. Explore the field of pharmacological services.	NA
a. Research and describe the respective educational requirements, appropriate schools, licensure/certification/registration, work environment, job responsibilities, and salary information.	NA
2. Describe concepts and perform skills related to the field of pharmacology.	NA
a. Identify the proper components of a prescription.	NA
b. Differentiate between administration methods.	NA
c. Perform mathematical computations related to pharmacology.	NA
d. Given a teacher-created scenario, administer medication utilizing the Six Rights of Medication Administration.	NA
UNIT 18: Clinical Capstone Project	
1. Students will research and learn about common diseases and disorders that affect human beings, including symptoms, causes, and treatments.	NA

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a. Develop a fictional patient for the duration of the clinical capstone project, incorporating specific details and factors to characterize this individual.	p. 36
b. Select a disease or disorder that will be tracked in the fictional patient. See the table below for common disease and disorder ideas.	p. 191
c. Explore the five patient-centered steps in the patient care process and apply the process to the fictional patient by providing patient-centered care.	p. 112, p. 114, p. 117
d. Apply the patient care process to the fictional patient by providing patient-centered care as applicable.	p. 112, p. 114, p. 117
e. Report the outcome of the patient's problem in a mock scenario, illustrating the steps taken by the medical caretaker within a teacher-approved method.	p. 112, p. 114, pp. 117-118
f. Record the patient care process as needed in the state-approved digital portfolio.	p. 112, p. 114, pp. 117-118, p. 390

Technology Supporting Document

Mississippi Requirement	MyLab/Mastering	Bookshelf by VitalSource (etext for CTE titles)
Technology Supporting Document includes the Learning Management System (LMS) and its hardware and software capabilities. The document should include the following information:	n/a	n/a
i. Thin Common Cartridge 1.3 – IEDTECH Global Standards	We don't specifically support Thin Common Cartridge. When Pearson is integrated with an LMS using our LTI 1.3 app, the instructor can create deeplinks which are an external tool item. These can potentially be imported and exported in Thin Common Cartridge files. However, this is not a typical part of the workflow for creating or copying Pearson courseware.	Thin common cartridge employs LTI, which is fully supported.
ii. School rostering	Users are rostered into the Pearson courseware when they access their Pearson product for the first time. If the Pearson courseware is integrated with an LMS, the user will have a Pearson account created for them in most circumstances. We take the email address associated with the LMS account and make that the Pearson username, but if that username already exists in our system then we can't automatically create the account, and we ask the user to log in or create a new account instead. This is usually only a concern if the school district recycles email addresses. Returning students will be recognized by their LMS credentials and passed to their preexisting Pearson account. The experience is completely SSO after the Pearson account is successfully created and matched with the LMS account.	Rostering via LTI is fully supported.
iii. PDF and/or ePUB format	Pearson eTexts use our own format and browser. Alternative file types may be available for users with accessibility needs. Some products may include supplemental materials in PDF format.	EPUB is preferred for accessibility, but tagged PDF's will also work.

iv. Alternative text (image), captions and subtitles (videos), read-alouds, and other accessibility functions	Pearson works closely with key members of the disability and advocacy community who are committed to accessible instructional materials. We work with organizations such as W3C, the DIAGRAM Center, Book Industry Study Group, the Center for Accessible Materials Innovation, and the EDUPUB Alliance (EPUB for Education). Pearson is pleased to announce our collaboration with the Book Industry Study Group to promote the launch of Quick Start Guide to Accessible Publishing. Pearson staff contribute time, expertise, and creativity to moving accessibility forward. We conduct user studies and a variety of research and usability studies on important topics, such as assistive technology use, and on product prototypes. We collaborate with advocacy groups and share advances and insights through conference presentations. Students can now instantly purchase accessible digital textbooks for select Pearson titles, providing affordable, faster, and more efficient access to their learning materials. Alternate text files for other Pearson titles are available for qualified students upon request and at no added cost, provided the student has purchased or is renting the print or digital textbook. All other requests can be placed using Pearson's disability request form. Please understand that it may take up to 10 business days for you to receive the electronic file. https://www.pearson.com/en-us/legal-information/accessibility.html	Pearson works closely with key members of the disability and advocacy community who are committed to accessible instructional materials. We work with organizations such as W3C, the DIAGRAM Center, Book Industry Study Group, the Center for Accessible Materials Innovation, and the EDUPUB Alliance (EPUB for Education). Pearson is pleased to announce our collaboration with the Book Industry Study Group to promote the launch of Quick Start Guide to Accessible Publishing. Pearson staff contribute time, expertise, and creativity to moving accessibility forward. We conduct user studies and a variety of research and usability studies on important topics, such as assistive technology use, and on product prototypes. We collaborate with advocacy groups and share advances and insights through conference presentations. Students can now instantly purchase accessible digital textbooks for select Pearson titles, providing affordable, faster, and more efficient access to their learning materials. Alternate text files for other Pearson titles are available for qualified students upon request and at no added cost, provided the student has purchased or is renting the print or digital textbook. All other requests can be placed using Pearson's disability request form. Please understand that it may take up to 10 business days for you to receive the electronic file. https://www.pearson.com/en-us/legal-information/accessibility.html and https://accessibility.vitalsource.com
v. 508 compliant platform	We gratefully acknowledge and endorse the work of the Web Accessibility Initiative of the World Wide Web consortium on the Web Content Accessibility Guidelines (WCAG) 2.2, as well as the work of United States Access Board and the Information Technology Advisory Committee (TEITAC) on their Section 508 Refresh Drafts. We strive to provide equal access for all students. To achieve this goal, we've created the Pearson Accessibility Guidelines for eLearning. These guidelines provide developers standards for creating the most effective educational content. https://www.pearson.com/en-us/legal-information/accessibility.html	We gratefully acknowledge and endorse the work of the Web Accessibility Initiative of the World Wide Web consortium on the Web Content Accessibility Guidelines (WCAG) 2.2, as well as the work of United States Access Board and the Information Technology Advisory Committee (TEITAC) on their Section 508 Refresh Drafts. We strive to provide equal access for all students. To achieve this goal, we've created the Pearson Accessibility Guidelines for eLearning. These guidelines provide developers standards for creating the most effective educational content. https://www.pearson.com/en-us/legal-information/accessibility.html and https://accessibility.vitalsource.com
vi. Privacy-data security specifications	Pearson's privacy and data security specifications are linked here: https://www.pearson.com/en-us/privacy-center/privacy-notices.html	Vitalsource's privacy and data security specifications are linked here: https://www.pearson.com/en-us/privacy-center/privacy-notices.html and https://vitalsource.com/privacy

vii. Browser and OS support	Browser & OS Support Information can be found here: https://support.pearson.com/getsupport/s/article/Using-an-Alternate-Supported-Browser	Browser and OS Support Information can be found here: https://bookshelfsupport.vitalsource.com/hc/en-us/sections/32270458995095
b. LMS is a generic term for platforms like Canvas, Google, and Schoology. A software platform designed to manage, deliver, and track educational courses, training programs, or learning and development initiatives. It provides educators with tools to create and organize content, manage student enrollments, track progress, assess performance, and facilitate communication between instructors and learners. LMSs often include discussion forums, assignment submissions, quizzes, grading, and reporting.	Our LTI 1.3 app is available for Canvas, Schoology, Blackboard, Brightspace/D2L, Moodle and Sakai. We can also integrate with Clever and Classlink, but we would suggest integrating with one of the LMSes listed instead because those integrations have a bigger feature set, most notably grade sync.	Yes, Vitalsource is compatible with and can integrate with ClassGather.
c. ClassGather offers customers access to their digital instructional materials through direct integrations with publisher platforms. As a certified integration partner, ClassGather supports roster exchange with publishers via OneRoster (CSV or API) and SSO access via SAML, oAuth, or LTI. Through automated resource assignment, access to digital titles is provisioned at the time of purchase, so student and teacher access “just works” without additional content or integration configuration.	We don't currently integrate with ClassGather.	Yes, Vitalsource is compatible with and can integrate with ClassGather.

Digital Access & Implementation Guide

Reviewers Guide

Mississippi HQIM Adoption

CTE: Healthcare & Human Services – Health Science (Core I)

Health Science Fundamentals: Exploring Career Pathways, ©2024

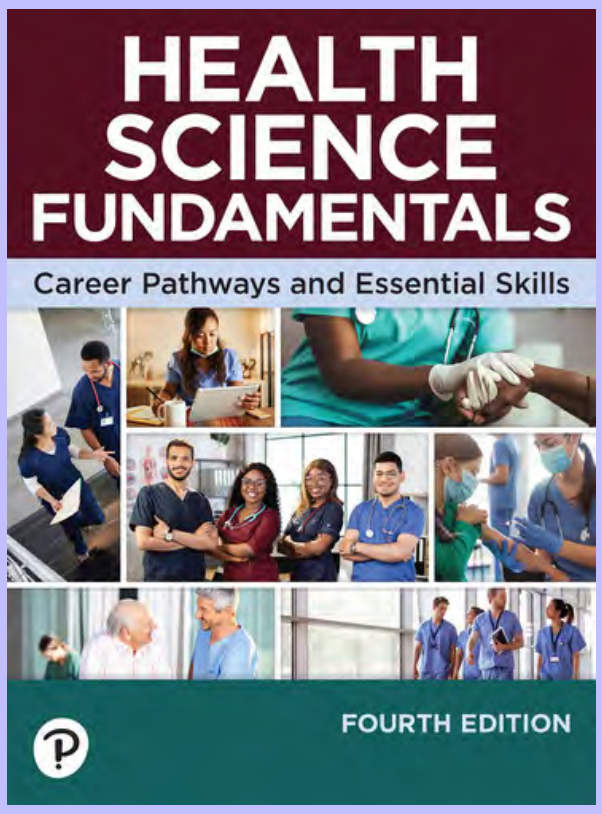
Program Description

Health Science Fundamentals **meets the standards for the following YouScience certifications:**

-Essential Healthcare Practices (NCHSE)
-Foundations of Healthcare Professions (NCHSE)
-Human Structure Functions A & B (NCHSE)
-National Health Science Certificate (NCHSE)
-Health Science Fundamentals

Health Science Fundamentals combines lessons in anatomy and physiology, medical terminology, and clinical skills to develop a competent and productive healthcare workforce.

- **Up-to-date content:** Includes additional sections on public health and working in teams.
- **Visuals:** Photos and infographics for graphical understanding.
- **Industry standards:** Aligns with the latest healthcare standards.



Review text link:

https://mlm.pearson.com/

Access Credentials:

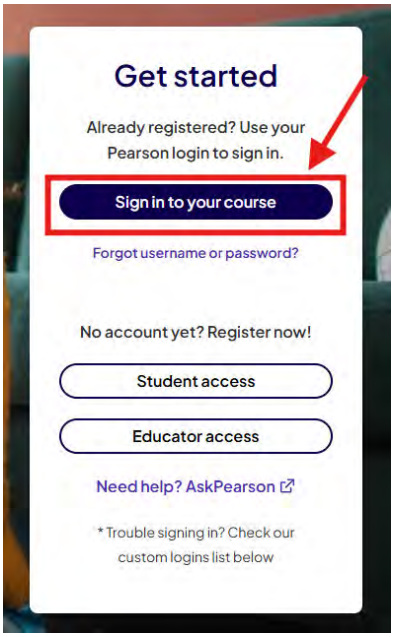
Username: msscienceandcte2025
Password:MSAdoptions2025

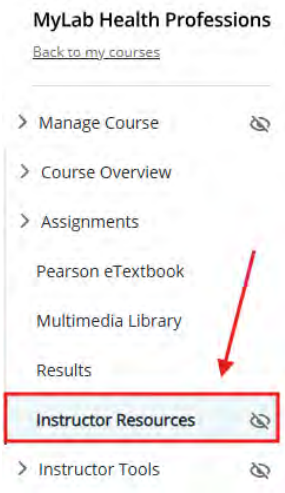
The Pearson Sample Credentials for this title allow multiple users in different locations to review the text and its features at the same time. A single set of demo credentials provides access for all requested digital categories (demo, limited, and full access). If this title is chosen for adoption, Pearson will supply demo access for the entire adoption period.

Access Credentials

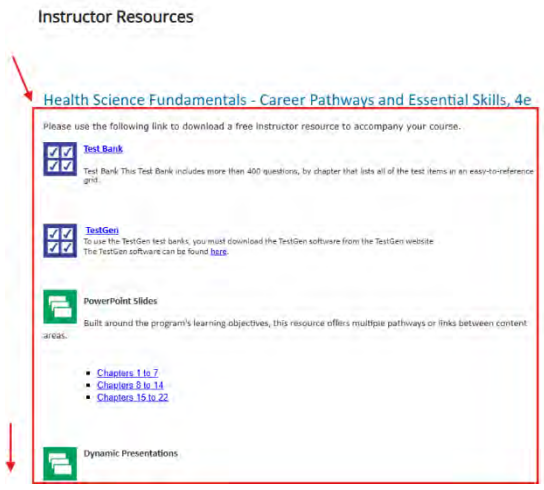
1. Navigate to:
   https://mlm.pearson.com/

2. Select “Sign in to your course”
   - Enter the credentials:
   - Username: msscienceandcte2025
   - Password: MSAdoptions2025
   - Select “Sign in”



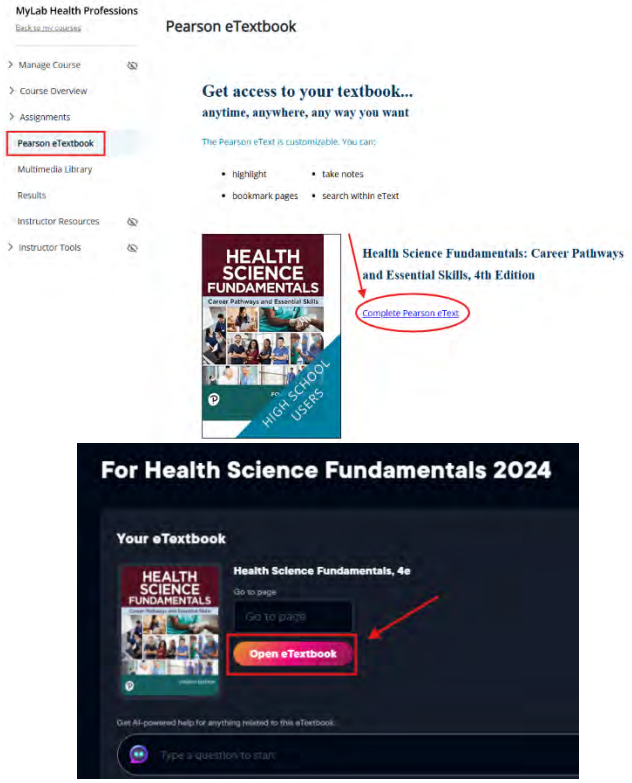


3. Accessing a Course
   - Select the course/title desired by hovering over the title and clicking.
   - On the Course Home Screen, choose the materials you want to review.
   - To review the Instructor Resources, select “Instructor Resources” from the left menu, then explore the various options.
   - When selected, individual resources will download/open in a new tab. Be sure to scroll down to see all options.



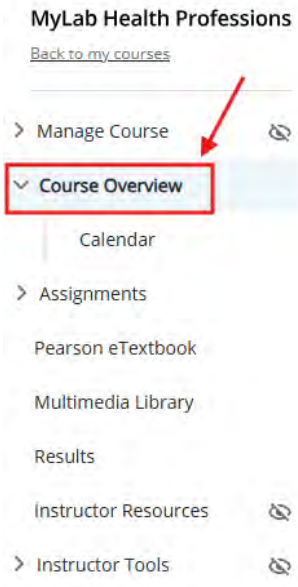
4. Reviewing the etext

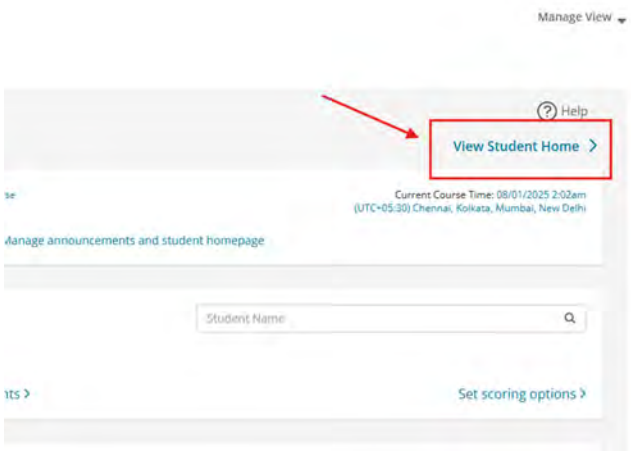
- From the left menu, select “Pearson eTextbook”, then “Complete Pearson eTextbook”.
- A new tab will open. Select “Open eTextbook.”
- In the eTextbook, use the left menu to explore the table of contents, notebook, flashcards, and other features.



5. Reviewing Additional Resources

- From the first tab, use the left menu to expand and explore options under “Course Overview”, “Assignments”, “Multimedia Library”, “Instructor Tools”, etc.
- ***Note: To access the Student view, select “Course Overview” from the left menu, then “View Student Home” from the upper right corner.***





6. Guided Platform Walkthrough

- For a guided MyLab walkthrough, including an overview of key features, please visit: https://www.youtube.com/watch?v=Ig3X7Vu_wYg&feature=youtu.be

7. Formats available

- Student Edition (HS Hardcover); 9780138082758; Book
    - with MyLab digitally delivered access code; 9780138083168; Book + 1 year digital
    - with six (6) MyLab digitally delivered access codes; 9780138083229; Book + 6 year digital
- MyLab digitally delivered access code; 9780138082819; 1 year digital
- Six (6) MyLab digitally delivered access codes; 9780138267612; 6 year digital
- Student Activity Guide; 9780138082765; Book
- Student Edition with Student Activity Guide ; 9780138098735; Book
- Teacher's Wraparound Edition; 9780138082802; Print Teacher's Edition

Pearson Reviewers Guide

Mississippi HQIM Adoption

CTE: Healthcare & Human Services – Health Science (Core II)

Anatomy, Physiology, & Disease: An Interactive Journey for Health Professionals, ©2024

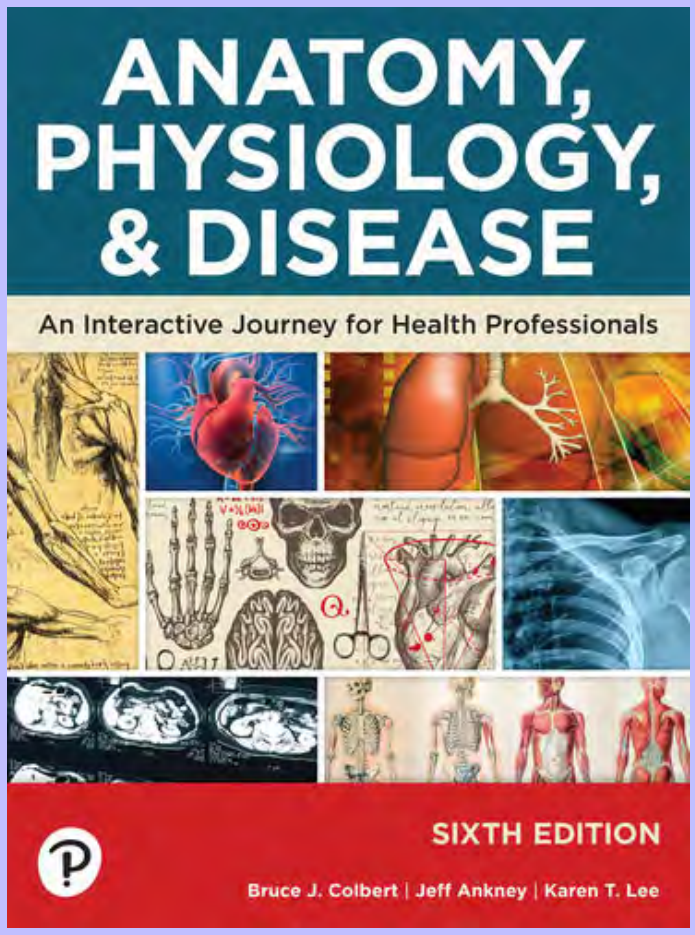
Pearson

Program Description

***Anatomy, Physiology and Disease* meets the standards for medical anatomy and physiology from YouScience.**

Anatomy, Physiology, and Disease helps build strong connections to key ideas that help students prepare to be healthcare practitioners.

- **Comprehensive learning:** Presents the interrelationships between anatomy, physiology, and pathology.
- **Practical applications:** Clinical applications, common diagnostic tests, pharmacology information, workplace and professionalism skills.
- **Current research**: All body systems content has been updated to include the most recent research connecting disease states to abnormal changes in anatomy and physiology.
- **Enhanced training with MyLab®** – This interactive online platform is a unique web-based learning resource that provides a range of visual, auditory, and interactive elements to enhance training.



Review text link:

https://mlm.pearson.com/

Access Credentials:

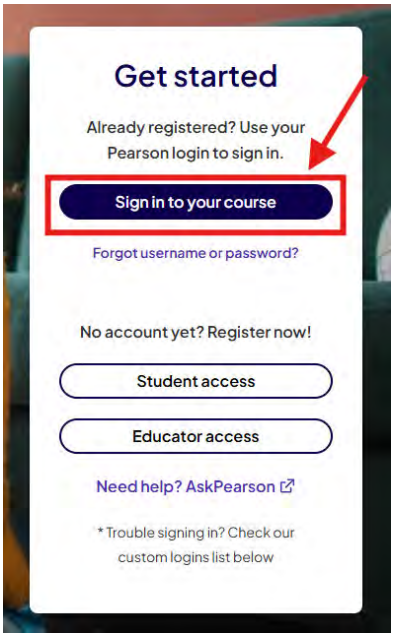
Username: msscienceandcte2025
Password: MSAdoptions2025

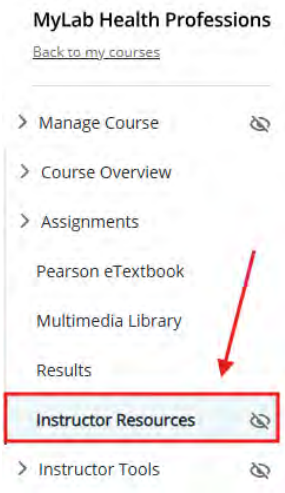
The Pearson Sample Credentials for this title permit multiple users in multiple locations to review the text and its features simultaneously. As such, these credentials represent all categories of digital access requested (demo, limited, and full access). If this title is selected for adoption, Pearson will provide demo access for the full adoption period and/or provide alternate logins, as needed.

Access Credentials

1. Navigate to:
   https://mlm.pearson.com/

2. Select “Sign in to your course”
   - Enter the credentials:
   - Username: msscienceandcte2025
   - Password: MSAdoptions2025
   - Select “Sign in”





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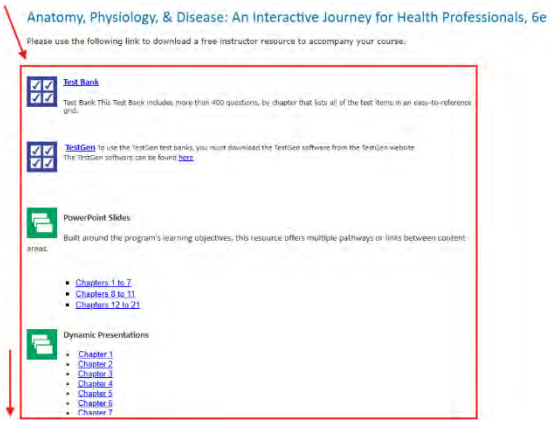

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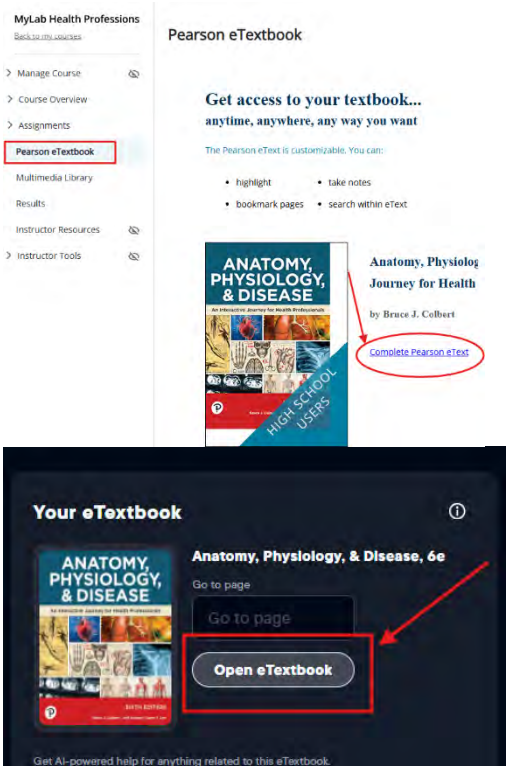

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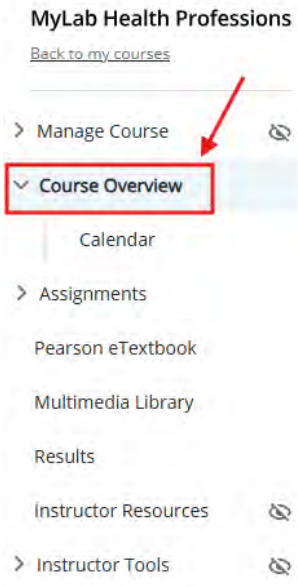
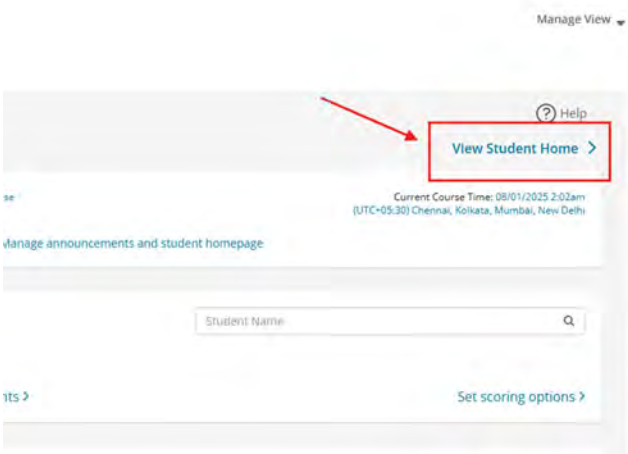
- ***Note: To access the Student view, select “Course Overview” from the left menu, then “View Student Home” from the upper right corner.***





6. Guided Platform Walkthrough

- For a guided MyLab walkthrough, including an overview of key features, please visit: https://www.youtube.com/watch?v=Ig3X7Vu_wYg&feature=youtu.be

7. Formats available

- Student Edition (HS Hardcover); 9780138045180; Book
    - with MyLab digitally delivered access code; 9780138046644; Book + 1 year digital
    - with six (6) MyLab digitally delivered access codes; 9780138046651; Book + 6 year digital
- MyLab digitally delivered access code; 9780138045487; 1 year digital
- Six (6) MyLab digitally delivered access codes; 9780138267568; 6 year digital
- Student Activity Guide; 9780138045210; Book
- Student Edition with Student Activity Guide; 9780138098797; Book
- Teacher's Wraparound Edition; 9780138045289; Print Teacher's Edition

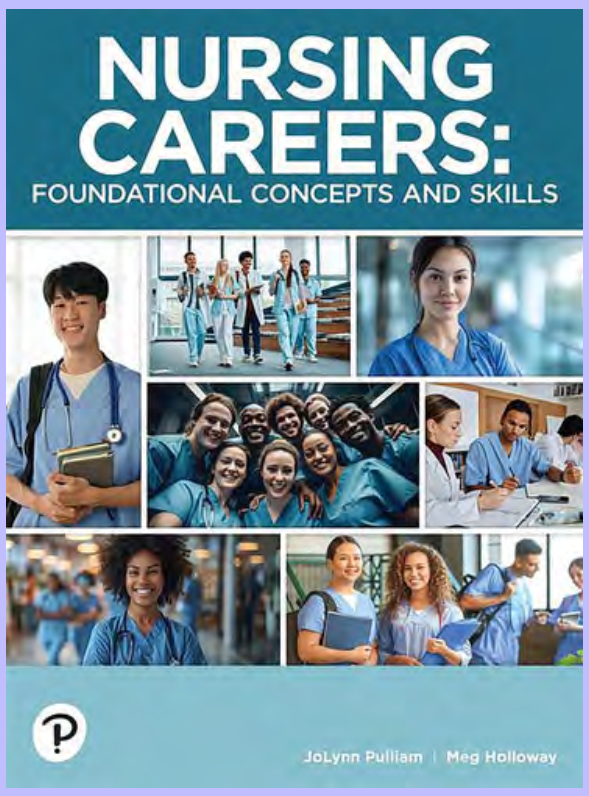
Pearson Reviewer Guide

Mississippi HQIM Adoption

CTE: Healthcare & Human Services – Healthcare & Clinical Services (Healthcare & Clinical Services II)

Nursing Careers: Foundational Concepts and Skills ©2026

Program Description



Nursing Careers: Foundational Concepts and Skills, 1st edition, prepares for entry level careers in Nursing, through essential healthcare concepts and practical clinical skills.

- **Key concepts:** Includes the history of nursing and a nurse's role in society.
- **Practical application:** Focuses on patient safety, basic clinical skills, patient comfort, and specialty areas of care.

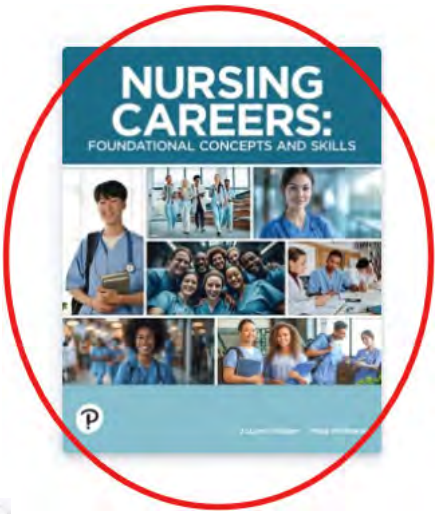
Digital Sample Access:
https://vstgo.co/r/y6go

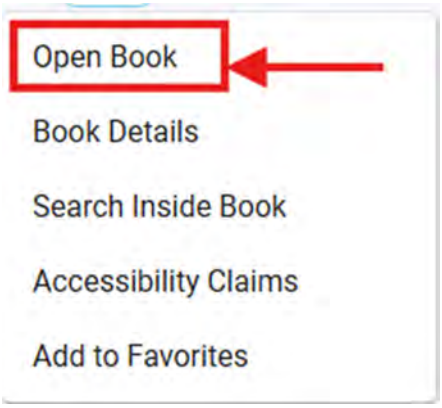
The Pearson Sample Link for this title requires no credentials. Multiple users in multiple locations can review this text and its features simultaneously. As such, this singular link represents all categories of digital access requested (demo, limited, and full access). This link will expire on 7/28/26. If this title is selected for adoption, Pearson will provide demo access for the full adoption period.

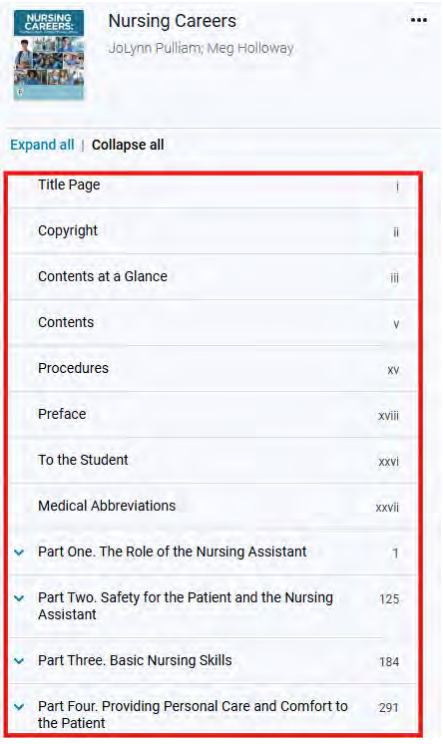
Pearson

1. Accessing the Course & Instructor Resources

- Navigate to: https://vstgo.co/r/y6go (There are no log-in credentials.)
- Once you have agreed to the "Terms of Use" (if applicable), hover over the thumbnail for your title.
- Select "Open Book" or simply click on the cover.





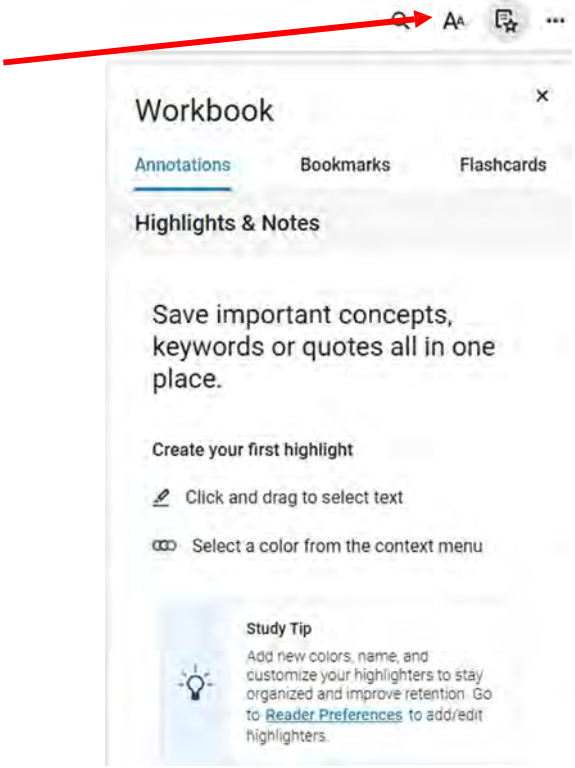


2. Reviewing the eText

- Using the left-hand menu, select resources to review, such as:
  - Chapters
  - Sections
  - Appendices
  - Glossary

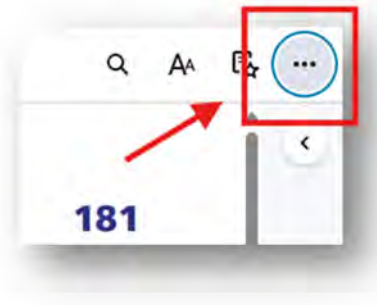
3. Reviewing the Workbook

- To open the Workbook, select the document/star icon in the top right corner.
- Browse the Workbook, including Annotations, Bookmarks, and Flashcards.



4. Reviewing Additional Features

- Select the 3 dots in the upper right corner to see more options, including the "Read Aloud" feature.



- For further information on key features of this title, please visit our website: https://www.pearson.com/en-us/schools/subject-catalog/p/nursing-careers-foundational-concepts-and-skills/P200000014102.

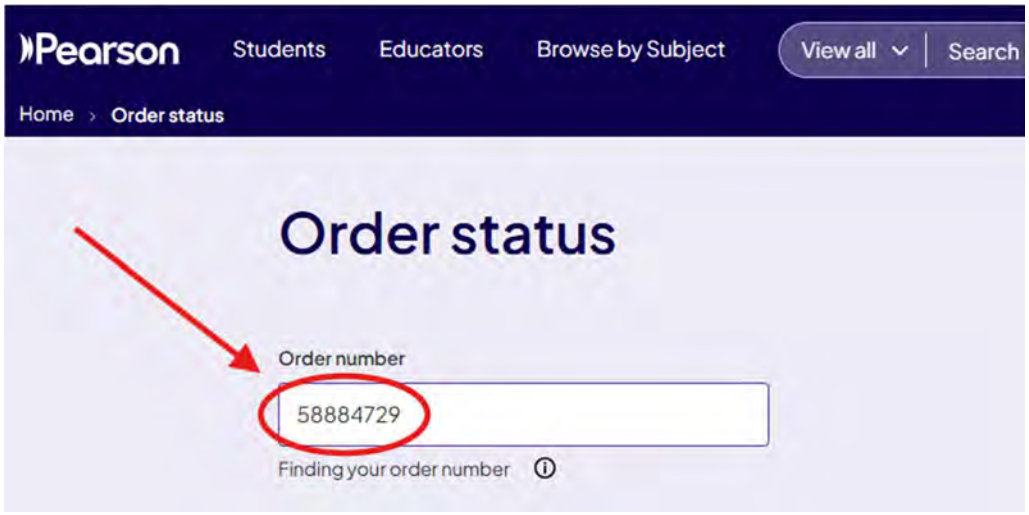
Presentation Video

CTE: Healthcare & Human Services

https://youtu.be/uHiPK9aBQ9I

Physical Sample Information

Pearson has provided physical samples of the textbooks in this section (pupil edition and teacher edition, if printed teacher edition is available). The Pearson order number for the shipment is: **58884729**. Details and tracking numbers can be found on our Order Status Page after entering the order number.



Pearson Order Status Page