



Nursing Careers Course Outline

Course Description

SVCTE Nursing Careers is a 519 hour course that prepares students for roles and responsibilities in hospitals, skilled nursing facilities (SNF), hospice, assisted living facilities and other related health settings in the Nursing Pathway. Students will learn to cover basic patient care, infection control, nutrition, anatomy, communications and documentation, safety and emergency procedures, and patient rights. Students also receive hands-on training in performing basic nursing tasks such as taking vital signs, moving patients, and providing personal care. In addition to employability and professionalism, this course will include: medical terminology, medical/surgical asepsis, the human body in health and disease, assessment and diagnosis, CPR certification, rehabilitative nursing, long term care patient/resident care, Phlebotomy, ECG, **electronic health record (EHR) system**, and medication administration. Students will research the different careers that they can specialize in with a nursing degree. Students who satisfactorily complete the two semester long course may qualify to obtain an SVCTE certificate of completion, **Medical Terminology NHA Specialty Certificate, Anatomy and Physiology NHA Specialty Certificate** and be eligible to sit for the National Patient Care technician/assistant (CPCT/A), and National ECG Technician (CET) Certification exams. Students will do 120 hours of internships in skilled nursing facilities beginning in the second semester with a B grade and above.

Course Details

Length of Program and Academic Credits Earned:

Year-long 3 hour course = 519 hours total

30 total units (15/semester):

- 20 non-a–g elective credits (10/semester)
- 10/10 UC “d” lab science and “g” elective credits (5/5 semester)

Pre-Requisites:

- High School Junior or Senior, or 16 years or older

CTE Classification:

- **Industry Sector:** Health Science and Medical Technology
- **Industry Pathway:** Patient Care
- **CA Basic Education Data System (CBEDS) Code:** 4275

<ul style="list-style-type: none"> • Completed Biology and Algebra with a C or better • Algebra 	
<p>Work-Based Learning: Internship/Job Shadow; Students with a B or better and demonstrated mastery of skills, may be offered Job Shadow placement/ Internship for second semester.</p>	<p>Certifications & State/National Tests:</p> <ul style="list-style-type: none"> • SVCTE Certificate of Completion with successful completion of course with a grade of “C” or better • BLS/First Aid/AED • OSHA 10-Hour General Industry – (Healthcare) • Medical Terminology NHA Specialty Certificate • Anatomy and Physiology NHA Specialty Certificate • Health Insurance Portability and Accountability Act (HIPAA) • Communication Skills (Individual) • Critical Thinking (Individual) • Interviewing Skills (Individual) • Eligible to sit for the National Patient Care Technician/Assistant (CPCT/A) Exam • Eligible to sit for the National ECG Technician (CET)

Community College Articulations

Students completing the Nursing Careers course with a grade of “B” or better may be granted college credits at the following community college:
 Mission/West Valley College – HOC 001 Medical Terminology 3.0 Vocational Nursing Requirement
 HOC 006 Personal Health and Lifestyles 3.0 Vocational Nursing Requirement

More info: <https://missioncollege.edu/>

Evergreen Valley/San Jose City College – In development with articulation agreement

De Anza/Foothill College – In development with articulation agreement

Ohlone College – In development with articulation agreement

Gavilan college – In development with articulation agreement

Possible Education & Career Pathways		
College & Career Pathways:	Career Opportunities	O*NET Codes
<p><u>Post-Secondary:</u> Students with a high school diploma and having successfully completed this course have a number of entry-level career opportunities, as well as continuing their education.</p>	<ul style="list-style-type: none"> ● Nurse Assistant ● Ophthalmic Medical Technologists ● Personal Care Aide ● Phlebotomist/Technicians ● Cardiovascular Technologists and Technicians ● Home Health Aide 	<p>31-1131.00 29-2099.05 31-1122.00 31-9097.00 29-2031.00 31-1011.00</p>
<p><u>Community College Majors & Degrees:</u></p> <ul style="list-style-type: none"> ● AA or AS in Biology, Chemistry, Nursing, Laboratory, Diagnostic Imaging 	<ul style="list-style-type: none"> ● Registered Nurses AA/AS ● Licensed Practical and Licensed Vocational Nurses ● Medical and Clinical Laboratory Technician ● Radiologic Technologists and Technicians ● Medical Secretary 	<p>29-1141.00 29-2061.00 29-2012.00 29-2034.00 43-6013.00</p>
<p><u>University Majors & Degrees:</u></p> <ul style="list-style-type: none"> ● BA or BS in Biology, Chemistry, Nursing, Pre-Med 	<ul style="list-style-type: none"> ● Registered Nurse BA/BS ● Nurse Midwives ● Medical and Clinical Laboratory Technologists ● Chemistry Teacher, Postsecondary ● Biological Science Teacher, Postsecondary 	<p>29-1141.00 29-1161.00 29-2011.00 25-1052.00 25-1042.00</p>
<p><u>Post-Baccalaureate Degrees</u></p> <ul style="list-style-type: none"> ● MA or MS, Phd in any Medical Related Field, Pharmacy 	<ul style="list-style-type: none"> ● Nurse Practitioner ● Nurse Anesthetists ● Psychiatrists ● Physicians and Surgeons, All Other ● Pharmacists 	<p>29-1171.00 29-1151.00 29-1066.00 29-1069.00 29-1051.00</p>

Unit 1: Nursing Careers Orientation (Recurring) 40 hours

Students will explore legal and ethical issues within the medical field and have an introduction to Healthcare from the nurse's standpoint. Identify trends in today's healthcare system, discuss implications of healthcare reform for delivery of patient care. Identify the components of the healthcare system. Describe the complex factors involved in the delivery of patient care, Identify the participants in the healthcare system. Discuss the differences between a certified nursing assistant (CNA) and a PCT, briefly discuss the history of the role of the patient care technician (PCT). Comprehend the current employment outlook for the PCT. Identify several considerations to keep in mind, other than financial compensation, when choosing a position as a PCT. Understand the credentialing requirements, the importance of credentialing, and the process of obtaining credentials.

- History of medicine/people's contributions
- Legal and ethical issues - OSHA regulations
- Functions of the healthcare team
- Qualities of a successful nurse
- Role and responsibility of the nurse
- Health care team members
- Health care settings in which nurses are employed
- Care for resident's personal property
- Adhere to standard precautions
- Mandated Reporter
- Responsibilities of nurse assistant to employer
- Professionalism for the nurse assistant
- Ethical behavior expected of the nurse
- Behaviors that maintain confidentiality
- Supervision of Patient Care Tech
- Patient Care Tech Scope of Practice
- Responsibility of nurse in resident care
- Proper use of equipment and protective devices
- Awareness of potential hazards (such as liquid spills)
- Patient Care Tech Scope of Practice
- Responsibility of nurse in resident care
- Describe the complex factors involved in the delivery of patient care.
- Discuss implications of healthcare reform for delivery of patient care.
- Discuss potential barriers to communication.
- Careers explored within the Nurse science field

Standards Alignments:

CCSS:LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.4, 11-12.5 ; **WS** 11-12.2, 11-12.4, 11-12.6,11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12. 6, 11-12.8, 11-12.9; **A-SSE** A-SSE1, A-CED 1, A-CED 4; **NGSS: SEP** 1, 3, 4, 5, 7, 8; **LS** 1A, 1B,1C,1D, 4D; **PS** 1

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
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<p>✓ Key Assignment: Students will engage in scholarly research related to exploration of different Nurse professions to produce a presentation of their choice. Students will highlight their chosen profession through either a PowerPoint presentation, brochure or oral presentation to share with peers.</p> <p>✓ Assessment: rubric, observation, peer and self- assessment</p>	<p>1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 8.0, 10.0</p>	<p>B1.0, B1.1, B1.2, B1.3, B1.4, B2.0, B2.1, B5.0, B6.2, B12.1</p>
<p>✓ Key Assignment: Students will create and organize a classroom binder and interactive notebook to take with them to their internships/Job Shadow including all vital information necessary for optimal job performance. Mathematical equations for dosages, Medical terms, Lab ranges, abbreviations, procedures, etc.</p> <p>✓ Assessment: quarterly binder check, questioning, oral defense</p>	<p>1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 9.0, 10.0</p>	<p>B1.2, B1.3, B1.4, B2.1, B2.3, B2.4, B4.4, B5.0, B5.3, B5.4, B5.5, B10.0, B10.7, B12.1, B12.2, B12.3</p>
<p>✓ Key Assignment: Students will individually and collaboratively investigate and explore potential careers within the nursing science field which will allow them to produce a poster, powerpoint or presentation highlighting their results.</p> <p>✓ Assessment: observation, classroom display of poster, presentation with powerpoint</p>	<p>1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 5.0, B 6.0, B 10.0, B 13.0</p>
<p>✓ Lab: chain of command critical thinking lab, students are divided into groups of three or four. Each group is given a situation written on an index card. Group will present the situation on their index card and the appropriate chain of command to best resolve the situation through role play for the class. The class will discuss how the organizational structure defines how nursing assistants relate to other members of the health care team.</p> <p>✓ Assessment: observation, questioning, quiz, teacher assessment</p>	<p>1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 2.0, B 2.1, B 2.2, B 2.4, B4.1,</p>
<p>✓ Lab: Mandating Reporting, students will role play scenarios and fill out the forms for mandated reporters in the hospital setting. Students will maintain HIPAA and ethical regulations while documenting.</p> <p>✓ Assessment: observation, questioning, peer assessment, teacher assessment</p>	<p>1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 2.0, B 2.1, B 2.2, B 2.4, B4.1,</p>
<p>✓ Lab: Role play lab, students into groups. Assign each group a section of Focus on PRIDE: Personal and Professional Responsibility, Rights and Respect, Independence and Social Interaction, Delegation and Teamwork, Ethics and Laws. Each group creates a short scene demonstrating the idea of the section the group was assigned.</p> <p>✓ Assessment: observation, questioning, quiz, teacher assessment</p>	<p>1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 2.0, B 2.1, B 2.2, B 2.4, B4.1,</p>

<p>✓ Lab: Role-playing scenarios that affect the caregiving process: chemical and blood exposure, natural disaster, falls, and fires. students will review good body mechanics in the workplace, demonstrate the appropriate use of a blood spill kit, and demonstrate the proper use of a fire extinguisher. Students will also go on a Scavenger hunt of the building or school to locate fire alarms, exits, and extinguishers, as well as demonstrating the necessary steps in the event of a fire.</p> <p>✓ Assessment: observation, questioning, quiz, teacher assessment</p>	1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2, B 2.4, B4.1,
<p>✓ Key Assignment: Students will work in groups to research Nurse scope of practice. They will create a powerpoint and present their findings to the class on the history, effects of the quality nursing care, and the contributions Nurses have to society and roles that they currently perform.</p> <p>✓ Assessment: oral presentation with informative brochure designed by students</p>	1.0, 2.0, 3.0, 4.0, 5.0, 8.0, 9.0, 10.0	B 4.5, B 6.2, B 12.0

Unit 2: Career Readiness, Facility Procedures and Medical Records (Recurring)		19 hours
<p>Students will develop personal and professional skills in the classroom that will transfer to the workplace. Students will also be learning the basics of the office environment, oral communication and preparation for the day. Discuss several characteristics of professionalism, students will explain the reasons why professionalism is important in the medical field, Why confidentiality is so important in the medical profession. Identify the hazards of using social media in healthcare. Discuss the importance of the patient care technician’s attitude in caring for patients. Students will also be able to list some examples of politics in the workplace.</p> <ul style="list-style-type: none"> ● Time management and organization ● Interpersonal skills ● Work with a variety of technology ● Creative thinking and problem solving ● Documentation and retrieval ● Accurate medical recording ● Report to chain of command ● Job search skills including: resume, job applications and effective interview skills ● Professional ethics ● Office environment/Ergonomics ● Charting ● Basic telephone etiquette <p>Standards Alignments: CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; RSIT 11-12.4, 11-12.5, 11-12.7; RRLST 11-12.4; WS 11-12.2, 11-12.4, 11-12.6, 11-12.7; WHSST 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; NGSS:SEP 3, 4, 7, 8; LS 1D, 4D; PS 1, 2</p>		
Key Assignments	CTE Anchor Standards	CTE Pathway Standards

<ul style="list-style-type: none"> ✓ Key Assignment: Students will participate in mock interviews with industry professionals, peers and instructors to increase their communication, interpersonal and employability skill-set. ✓ Assessment: teacher observation, journaling, questioning, oral defense 	1.0, 2.0, 3.0, 4.0, 7.0, 8.0, 9.0, 10.0	B6.2, B7.1, B13.1
<ul style="list-style-type: none"> ✓ Key Assignment: Students will rotate in pairs through a simulated nurse station in a hospital to perform clerical staff duties such as greeting Patients, patient Admission, phone management, appointment scheduling and chart maintenance to demonstrate mastery in reception skills. ✓ Assessment: observation, self-assessment, oral questioning 	1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0	B 5.0, B 6.0, B 7.0, B 10.0, B 12.0, B 13.0
<ul style="list-style-type: none"> ✓ Lab: Using bags and boxes, students will individually demonstrate to the instructor and their peers proper ergonomic lifting and safety techniques for various sizes of items, patients, and equipment through an obstacle course designed for patient rehabilitation. ✓ Assessment: observation, quiz, oral questioning, journaling 	1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.1, B 10.2, B 10.3
<ul style="list-style-type: none"> ✓ Key Assignment: Students will prepare a portfolio including a cover letter and resume through workshop, self/ peer editing, as well as teacher instruction and demonstration. ✓ Assessment: questioning, oral defense, portfolio check 	1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 9.0, 10.0	B6.2, B7.1, B13.1
<ul style="list-style-type: none"> ✓ Key Assignment: Students will work in groups to investigate the labor market, hiring requirements, salary range and benefits for Nurses working in the Santa Clara County area and produce an oral presentation to inform and instruct their peers on their knowledge of the workforce. ✓ Assessment: rubric, grading form sheet, observation 	1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0	B 4.5, B 12.0
<ul style="list-style-type: none"> ✓ Lab: Interviewing, Students will dress up and prepare for mock interviews with industry experts and help from administration. Students will rehearse questions to build confidence and be prepared for internship interviews. ✓ Assessment: observation, questioning, peer assessment, teacher assessment 	1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2, B 2.4, B4.1,
<ul style="list-style-type: none"> ✓ Lab: Career Readiness lab, 30 task cards that are meant to get students thinking and reflecting on career soft skills in stations. Students go through each station and use critical thinking skills to work through soft skill scenarios. ✓ Assessment: observation, questioning, quiz, teacher assessment 	1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2, B 2.4, B4.1,

Unit 3: Medical Terminology (Recurring)	40 hours
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Medical language will be an ongoing part of the entire course. Students will learn to use the proper terms and pronunciation necessary to work in a hospital, skilled nursing facilities (SNF), hospice, assisted living facilities and other related health settings. Students will be presented with extensive vocabulary relating to the medical field. This vocabulary is essential to build a knowledge base necessary to communicate effectively in the medical field.

- Word building – prefixes, suffixes and word roots in Latin and Greek
- Nursing terms and proper pronunciation
- Abbreviations & acronyms
- Notations and common symbols
- Reference materials
- Maintaining Homeostasis

Standards Alignments:

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **NGSS:** SEP 1, 2, 3, 4, 5, 7, 8; **LS** 1A,1B, 1C, 1D, 3A, 3B, 4D; **PS** 1, 2

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
<p>✓ Key Assignment: Using medical terminology presented throughout the year, students will individually create a traditional paper or electronic pictorial dictionary of medical terms to include, but not limited to: definition, illustration, sentence using the term, origin of word and root culminating in a personal dictionary chronicling the year.</p> <p>✓ Assessment: self-assessment, quiz, journaling, gallery walk</p>	1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 10.0	B 5.0
<p>✓ Key Assignment: Flashcards, Students will continuously grow their flashcard ring/bundle to use for quizzing partners and playing learning games in groups. Students will have over 250 Medical abbreviations, suffixes, prefixes symbols and root words in Latin and Greek to help them communicate in the medical language with other medical employees.</p> <p>✓ Assessment: self-assessment, quiz, journaling, assessment</p>	1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 10.0	B 5.0
<p>✓ Lab: “Homer-o-stasis” Students will plan and conduct an investigation to provide evidence in this activity for negative feedback mechanisms to maintain homeostasis. Objective: Keep the level, color and temperature the same in a leaky cup of yellow water - maintain homeostasis to keep Homer Simpson alive!</p> <p>✓ Assessment: observation, questioning, critical thinking and peer and self- assessment</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2, B 2.4,B 12.0

<p>✓ Lab: Gummy Bear Dissection Lab-Anatomical Terminology, an introduction to anatomical positioning and medical terminology. gummy bears and asks the students to both draw and dissect them in various positions and directions.</p> <p>Assessment: observation, questioning, test, pair share, journaling</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 2.0, B 2.1, B 2.2, B 2.4</p>
<p>✓ Lab: DNA Extraction from Wheat Germ, students will follow multi step procedures and take measurements, or perform technical tasks to extract the DNA and document their findings. Students will develop excellent laboratory skills and gain insight into the fundamental properties of the cell, cell membrane, and DNA. By the end of the lab, students will be able to understand the importance of DNA extraction and the role it plays in various fields such as medical research, and forensic science. Students will also appreciate the significance of laboratory techniques in scientific research and the vital role they play in advancing our understanding of the natural world.</p> <p>✓ Assessment: observation, questioning, test, pair share, journaling, critical thinking</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 2.0, B 2.1, B 2.2, B 2.4</p>
<p>✓ Lab: Enzyme Catalase Lab, Enzymes are always a tough topic for many students. This lab helps them to understand the role of enzymes in chemical reactions and what would happen if we did not have enzymes. Catalase is an enzyme that is commonly found in plant and animal tissues. The function of the enzyme catalase is to break down the chemical hydrogen peroxide inside living cells. Because it is toxic, or poisonous, hydrogen peroxide would soon kill the cell if it were not removed or broken down immediately.</p> <p>✓ Assessment: Observation, questioning, test, pair share, journaling</p>	<p>1.0, 2.0, 6.0, 5.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 2.0, B 2.1, B 2.2, B 2.4</p>
<p>✓ Key Assignment: While working in groups, students will define the given medical terms identifying the suffixes, prefixes and root words. Students will then teach their given words to their peers using the flashcards from previous assignments. Throughout the year, students will collect approximately 250 drawings of terms and keep them organized according to the different word elements. The words will also be alphabetized and classified by body systems. These drawings/terms will be recorded in a notebook which can be used for study and future reference.</p> <p>✓ Assessment: Teacher observation of completed work, written test, notebook check</p>	<p>1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 5.0</p>

Unit 4: Anatomy and Physiology (Recurring)	40 hours
<p>This unit focuses on the relationship between cells, tissue and organ systems. Also covered will be location, structure, function of each system, signs and symptoms of abnormal, pathological conditions which includes therapeutic and healing treatments for each condition. Hands-on labs will allow students to see and identify individual body parts and systems.</p>	

- Body basic organization - cell theory, tissue, organs
- Body Systems and their functions – gastrointestinal, urinary, cardiovascular, respiratory, reproductive, endocrine, nervous, musculoskeletal, special senses and blood-lymphatic
- Disease process related to each body system

Standards Alignments:

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **NGSS: SEP** 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1,2 **LS** 1A, B, C, D, 2.D, 3A, B, 4D

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
<p>✓ Lab: Clay models, In partners or groups while using video demonstration, diagrams and visual aids, students will assemble Clay models simulating organ systems while correctly identifying and labeling all parts.</p> <p>✓ Assessment: observation, written test, interactive notebook</p>	1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0
<p>✓ Lab: Life-Size Skeleton, Students will create a life size skeleton with the help of a partner to trace their body outline with paper. Students will then draw their bones and paste/staple/tape them on so they can be flipped up to reveal their name and definition and a fact about the bone. These will then be placed on display in the building hallway and later used for quizzing bones in pairs and groups.</p> <p>✓ Assessment: observation, written test, interactive, gallery walk</p>	1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0
<p>✓ Lab: Life-Size body systems, Students will create life-sized organs to go with their skeleton they recently finished in the lab prior. The organs will be attached with paste/staple/tape and be able to be lifted to reveal the term, definition and a fact about the organ. These will then be placed on display in the building hallway again, once finished and later used for quizzing the body systems in pairs and groups.</p> <p>✓ Assessment: observation, written test</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.1, B 2.2, B 2.4
<p>✓ Lab: Microscope Lab, with the use of direct instruction, demonstration and examples, students will examine human cells under the microscope and individually illustrate, identify and label the parts.</p> <p>✓ Assessment: observation, written test</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.1, B 2.2, B 2.4
<p>✓ Lab: Pig Dissection, during an examination of a pig (closest to human anatomy) cadaver, students will be able to identify the different structures and organ systems through gross anatomy. They will chart their findings and illustrate the different organs.</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2, B 2.4

✓ Assessment: observation, questioning, oral defense, test, pair share		
✓ Lab: Lab station activity the Human Body System. Inspired by the Bodies Exhibit, this is a student-lead activity exploring interesting facts, medical conditions, as well as the traditional classroom knowledge. ✓ Assessment: observation, questioning, oral defense, test, pair share	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2, B 2.4
✓ Lab: Chicken Wing Dissection, Chicken Wing Dissection, students can learn about anatomy and physiology of the arm and be able to look at the muscle and tendons of the chicken wing and maneuver the chicken wing using the tendons and ligaments. ✓ Assessment: observation, questioning, oral defense, test, pair share	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2, B 2.4
✓ Lab: Sheep Heart Dissection, students to learn about anatomy and physiology of the human heart. Students are able to easily identify the parts of the heart. ✓ Assessment: observation, questioning, oral defense, critical thinking, pair share	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2, B 2.4
✓ Lab: Lab station activity on the Human Digestive System. Will have students out of their seats and engaged in 9 stations giving them an opportunity to test students' knowledge (offer an opinion, answer questions based on a video or reading, draw, etc.) Where students are learning through assessment. Each station comes with a description card while some also contain more detailed instructions, a reading, questions to answer, etc. Students are equipped with a recording sheet (passport) to write their answers. ✓ Assessment: observation, questioning, oral defense, test, pair share	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2, B 2.4
✓ Key Assignment: Students will name devices that aid in moving residents to help with body plane positions. Students will list the pros and cons of using the gait belt, pivot disc, trapeze bar, and slide board. ✓ Assessment: Critical thinking, peer assessment, notebookcheck, test	1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2
✓ Key Assignment: Students will create an illustrated notebook that contains the various organ systems learned throughout the course. This notebook will contain illustrations of the organ systems, information related to the system and notes collected from teacher direct instruction. ✓ Assessment: observation, notebookcheck, test	1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 2.1, B 2.2
✓ Key Assignment: Independently or in pairs, students will research a disease or disorder, produce written information about their disease of choice, illustrate and create a prop (student choice of PowerPoint, tri-fold board, poster), and present to class and/or community and district partners. ✓ Assessment: rubric, peer assessment, checklist of work/guidelines, self- assessment	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 2.0, B 13.4

Unit 5: Medical and Surgical Asepsis/ Health & Safety (Recurring) 30 hours

This unit will introduce students to the important components of infection control and medical asepsis. Reducing the spread of microorganisms in a hospital setting is an important task for the nurse in any facility. Students will be introduced to standard precautions that are integral parts of this course designed to keep the student safe in school and in the workplace. Explain the difference between medical and surgical asepsis. Explain how each element of the chain of infection contributes to infection. List five major classifications of pathogens. Identify the body’s normal defenses against infections. Discuss standard precautions, and demonstrate the proper procedure for hand hygiene.

- Hand washing and application of Alcohol-Based Hand Rub
- Application and removal clean disposable gloves
- Microorganism and Infection process cycle
- OSHA regulations/Certification
- work related injury reporting
- Waste management
- Sterilization procedures
- Aseptic technique
- Needlestick Safety and Prevention Act
- Guidelines for use of Personal Protective Equipment (PPE)
- Types of blood-borne diseases
- Substance abuse in the workplace
- Classroom/lab safety
- On the job safety

Standards Alignments:

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **A-SSE** A-CED 1, A-CED 4
NGSS: SEP 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1A, 1B; **LS** 1.A, B, C, D, 2.D,4.D;

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
<p>✓ Key Assignment: Following all safety protocol and proper procedures learned through instruction and research, the students will role-play a scenario in which one person in the team gets a needlestick. As a group, they will discuss and document immediate steps to take and the role of post-exposure prophylaxis. Students will submit their documentation to the instructor for assessment.</p> <p>✓ Assessment: Teacher’s observation, oral questioning, peer assessment</p>	1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.1, B 10.2, B 10.3, B 10.4, B 10.5, B 10.6
<p>✓ Lab: Students will be exposed to various lab and safety violations, which will be staged throughout the classroom. Students will work in pairs to identify all of the safety violations and propose corrective action for each of the violations in a written safety report including photographs of the violation. Each pair will present their findings to the class.</p> <p>✓ Assessment: informal questioning, oral presentation, quiz</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.1, B 10.2, B 10.3, B 10.4, B 10.5, B 10.6

<p>✓ Lab: Student demonstrations of the correct donning and removal of PPE when caring for a resident on contact precautions for MRSA or C. difficile, as well as droplet and airborne precautions.</p> <p>✓ Assessment: informal questioning, oral presentation, quiz</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 10.1, B 10.2, B 10.3, B 10.4, B 10.5, B 10.6</p>
<p>✓ Lab: Students identify potential infection control concerns in a resident’s room. Set up a “resident room” using a hospital bed, mannequin, and a variety of healthcare equipment. Within a specified length of time, students work in teams to identify problems and potential solutions.</p> <p>✓ Assessment: informal questioning, oral presentation, quiz</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 10.1, B 10.2, B 10.3, B 10.4, B 10.5, B 10.6</p>
<p>✓ Lab: Students put on gloves and rub colored chalk onto the finger and palm areas; after wearing for a short period of time, have students take off gloves and make note of skin or objects that have been touched and therefore “contaminated.” Students then don a pair of vinyl gloves. Put a quarter-sized amount of water-based paint in the palm. Ask the students to close their eyes and rub as though using hand sanitizer. Students open their eyes and inspect gloves to check for any missed areas.</p> <p>✓ Assessment: informal questioning, oral presentation, quiz, teacher assessment</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 10.1, B 10.2, B 10.3, B 10.4, B 10.5, B 10.6</p>
<p>✓ Key Assignment: In groups students will create a poster that describes and illustrates the infection process cycle. Students graphically identify where in the cycle the process can be stopped and by what means. Each group will present the posters to the whole class and will be hung in the classroom for gallery walk.</p> <p>✓ Assessment: Think, write,share, rubric</p>	<p>1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 10.1, B 10.2, B 10.3</p>
<p>✓ Key Assignment: OSHA scenario essay, Students will research how to identify and assess the risk of hazardous chemical exposure in the workplace, and develop measures to prevent or minimize exposure.</p> <p>✓ Assessment: Think, write,share, rubric</p>	<p>1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 10.1, B 10.2, B 10.3</p>
<p>✓ Lab: Students will individually perform antiseptic hand washing, demonstrate proper donning and removal of Personal Protective Equipment to a peer for feedback and then to the instructor for quality check.</p> <p>✓ Assessment: Students talk, teacher’s observation, peer assessment, worksheet</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 10.4, B 10.5</p>
<p>✓ Lab: Students will individually perform antiseptic hand washing, demonstrate proper donning and removal of Personal Protective Equipment to a peer for feedback and then to the instructor for quality check.</p> <p>✓ Assessment: Students talk, teacher’s observation, peer assessment, worksheet</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 10.4, B 10.5</p>

Unit 6: Patient Assessment (Recurring)

30 hours

Students will use examination equipment such as: various thermometers, blood pressure measurement (both manual and electronic), and assessment to conduct on a patient. Recall the average body temperature, pulse rate, respiratory rate, and blood pressure for various age groups. Describe emotional and physical factors that can cause the body temperature to rise or fall. Specify physiologic factors that affect blood pressure. Describe the six methods of examination, and give an example of each. Summarize the instruments and equipment the healthcare provider typically uses during a physical examination.

- Patient positioning
- Vital signs: temperature
- Abnormal breathing patterns
- Observations and reporting of resident’s pain
- Height and weight and BMI calculations with conversions
- Eye/ear testing, exams, administering eye and ear medication and irrigation
- Auditory acuity measurement
- HIPAA compliance to ensure confidentiality/Certification
- Patient empathy
- Use of temperature as an indicator of body function
- Nursing measures to raise and lower the temperature of the body
- Circulatory system as it relates to pulse and pulse sites
- Factors that increase and decrease pulse, and the qualities to observe in taking a pulse
- Respiration and factors that affect respiratory rate
- Observations to be made when measuring respirations
- Circulatory system effects of blood pressure
- Factors that increase or decrease blood pressure
- Blood pressure equipment
- Procedure for taking a blood pressure reading
- Process for taking TPR & BP as a combined procedure
- Recording vital signs on chart, graph, and nursing assistant notes

Standards Alignments:

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **A-SSE** 1, A-CED 1, A-CED 4 **NGSS:** SEP 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1, 2; **LS** 1A, B, C, D, 4D

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
<p>✓ Lab: In a group of 3, students role play a Nurse and patient examination with a third student coaching and reading instructions according to exam protocol. Students will rotate between all roles and complete the examination in the desired timeframe to assist with developing empathy for the patient and HIPAA compliance while learning the proper techniques. Students will perform SOAP assessments, In and out quantity</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 6.1, B 6.2, B 6.3, B 6.4, B 6.6</p>

<p>checks, and Ambulatory exams. (This role playing will also be used to teach multiple skills throughout the year.)</p> <p>✓ Assessment: observation, peer feedback, student documentation of the skill, written test</p>		
<p>✓ Lab: Vital Sign Lab, this activity will help students understand body homeostasis by taking vital signs using a Pulse oximeter, blood pressure monitor, thermometer, reflex hammer, pen light/small flashlight, and a watch or clock/timer. students will need to beat a timer and compete to see who can get accurate results in the standard 5 minute time frame.</p> <p>✓ Assessment: observation, quiz, self-assessment, journaling, oral questioning</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3
<p>✓ Lab: Senses Stations, 9-station student-directed lab activity for students to learn about the anatomy and physiology of the senses including hearing, vision, touch, balance, taste, and smell.</p> <p>✓ Assessment: observation, quiz, self-assessment, journaling, oral questioning</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3
<p>✓ Lab: Hearing and Balance Lab, students will do 4 activities (Rinne's, Weber's, Balance and testing hertz levels) plus lab discussion to demonstrate how our hearing can affect our balance.</p> <p>✓ Assessment: observation, quiz, self-assessment, journaling, oral questioning</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3
<p>✓ Lab: Students will obtain weights using a stadiometer, wheelchair scale, and mechanical lift while using proper body ergonomics and patient positioning from previous modules.</p> <p>✓ Assessment: observation, quiz, self-assessment, journaling, oral questioning</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3
<p>✓ Lab: Body Movement Lab, Each student will need to think of some kind of creative activity (shooting a basketball, opening a box of cereal, ordering lunch, or performing a dance move) and describe how the human body is able to perform that task through the various muscles needed to create the specific movements.</p> <p>✓ Assessment: observation, quiz, self-assessment, journaling, oral questioning</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3
<p>✓ Key Assignment: In order to promote patient empathy, students will wear an empathy belly simulating pregnancy and the associated discomfort. The students will be asked to assume the lithotomy position used for pap smears, rectal and vaginal exams, and birthing position while role playing nurse and patient. Students will record all positions and their use in their interactive notebooks with position illustrations.</p> <p>✓ Assessment: Observation, student journaling, written test, interactive notebook</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 4.3, B 4.4, B 6.4, B 7.1, B 7.3, B 12.1

Unit 7: Patient Care Procedures (Recurring)	30 hours
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Promoting independence and dignity while performing daily routine care. Students will be introduced to laboratory equipment and safety protocols while collecting, processing and testing various specimens. Identify guidelines for admission, transfer, and discharge of a patient. Identify nursing interventions for common patient reactions to hospitalization and how they relate to tasks assigned to the patient care technician (PCT). Describe how the PCT prepares a patient for transfer to another unit or facility. Identify nursing interventions for the prevention and treatment of pressure injuries. Summarize the procedure for perineal care for a male patient and a female patient. Explain how to change the gown of a patient with an intravenous line. List the six “rights” of medication administration.

- Bathing the resident
- Providing oral hygiene
- Nurse assistant’s role and responsibility for resident nail care and foot care
- Nurse assistant’s role and responsibility for caring for hair or residents
- Procedure for shaving a resident
- Maintaining healthy skin and identifying patients at risk for skin breakdown
- General guidelines for selecting and caring for resident’s clothing
- Assisting the resident with elimination
- frequency pattern for urination
- observations to be made about urine
- urinary incontinence and the need for immediate care
- purpose and general rules of care for urinary catheters
- the goals and methods for bowel and bladder training
- normal pattern of bowel movements and reportable observations
- the purpose of an ostomy and the care of residents with an ostomy
- Procedures for weighing and measuring height of the resident
- Common prosthetic devices and their care (artificial limbs, hearing aids, contact lenses, eye glasses and dentures)

Standards Alignments:

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **A-SSE** 1, A-CED 1, A-CED 4 **NGSS:** SEP 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1, 2; **LS** 1A, B, C, D, 4D

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
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<ul style="list-style-type: none"> ✓ Lab: Students will participate in correctly obtaining urine specimens including: clean catch, 24 hour urine specimen, and pediatric urine collection. They will measure specific gravity with a urinometer and refractometer, perform reagent strip dip urine test and process a urine specimen for microscopic exam and pregnancy test. ✓ Assessment: Charting, peer assessment, observation, written test, quiz, urine from donated Vet science animal or synthetic 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 4.5
<ul style="list-style-type: none"> ✓ Key Assignment: Assisting with Admission and Discharge, Students will be able to understand the admission and discharge process for patients, identify their roles and responsibilities, and communicate effectively with patients and their families. ✓ Assessment: Charting, peer assessment, observation, written test, quiz 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 4.5
<ul style="list-style-type: none"> ✓ Key Assignment: Demonstrate proper techniques for patient transfer. Students will identify the different types of patient transfer, such as lateral transfer, pivot transfer, and standing transfer. Explain the differences between these types of transfer and when each would be appropriate. Students will also have to fill out the forms when transferring to another facility. ✓ Assessment: Charting, peer assessment, observation, written test, quiz 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 4.5
<ul style="list-style-type: none"> ✓ Lab: Students work in partners with each one marking a "wound" on their patient without disclosing the location to the other person. Students must guess the location of the partner's wound by using anatomical directions. Students learn directional terms such as cranial, caudal, superior, inferior, posterior, anterior, distal, and proximal during this partner lab. ✓ Assessment: Charting, peer assessment, observation, Teacher observation 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.1, B 3.2
<ul style="list-style-type: none"> ✓ Lab: Pain Simulation Lab, students will be subjected to the same noxious stimuli for the same amount of time. Then compare and contrast how students respond differently by evaluating how they rated their pain on a 0-10 pain scale. This lab is to demonstrate that pain is subjective and open discussion for how people respond differently to pain. ✓ Assessment: informal questioning, oral presentation, quiz, observation 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.1, B 10.2, B 10.3, B 10.4, B 10.5, B 10.6
<ul style="list-style-type: none"> ✓ Lab: CBC Blood Panel Analysis, students will use the internet to interpret the results of a REAL CBC Blood Panel Test to determine what each abbreviation stands for, what the test measures, which values are in normal ranges and which are not, and what the patient's diagnosis will be. ✓ Assessment: Charting, peer assessment, observation, written test, quiz, independent internet research worksheet and essay 	1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0, 10.0	B 3.1, B 3.2

Unit 8: Patient Comfort (Recurring) 20 hours

This unit will introduce students to the patient care technician's (PCT) responsibilities of delivering a wide range of materials and care. By releasing the nurse to provide the care that only a nurse can provide, allowing the PCT to perform this task can enhance the patient's care. Explain how to change the gown of a patient with an intravenous line. Discuss the proper procedure for calculating a patient's intake and output. Discuss safety precautions to take when shaving the patient.

- Procedures for bed making and maintaining proper body mechanics
- Types of beds and bed positions
- Maintenance of the resident's environment.
- Nurse assistant's role in assisting nurse with administration of an enema and a suppository
- Major nursing care activities for residents with feeding tube (nasogastric or gastrostomy)
- Nursing care activities for a resident receiving intravenous (I.V.) therapy
- Nursing assistant's role in assisting the resident to maintain fluid balance
- Purpose and procedure for measuring the amount of fluid taken in and fluids excreted by the resident
- Nurse assistant's role in the care of residents' skin conditions and the use of non-prescription ointments, lotions, or powders
- Nursing's assistant role in the use of bandages, binders and dressings
- Use and method of applying anti-embolic hose/elastic stockings
- Role of the nurse assistant in the admission, transferring and discharging of a resident

Standards Alignments:

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **A-SSE** 1, A-CED 1, A-CED 4
NGSS: SEP 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1, 2; **LS** 1A, B, C, D, 4D

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
<p>✓ Key Assignment: Through role playing, the students will simulate a client/staff communication activity which will include a checklist with the following skills that must be demonstrated to mastery: Greeting patient, Bed making with patient in it, acknowledge patient concerns, cleaning feeding tube, Liquid intake, assessing skin conditions, Safety reminder devices, and investigative questioning.</p> <p>✓ Assessment: observation, self-assessment, oral questioning, oral defense</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 1.0, B 2.0, B 3.0, B 6.0, B 9.0
<p>✓ Lab: Shampooing and brushing the Hair, Students will demonstrate skills and precautions with patients with dandruff, alopecia, tinea capitis, pediculosis capitis, or head lice. Using water or dry shampoo depending on doctors orders, students will help with patient grooming.</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3

<p>✓ Assessment: observation, oral defense, quiz, self-assessment, critical thinking,</p> <p>✓ Lab: HAND, FOOT, AND NAIL CARE, Hands and feet often need special attention to prevent infection, odor, and injury. Problems arise from abuse or poor care of the hands and feet (e.g., biting the nails or wearing ill-fitting shoes). Students will demonstrate and verify with the nurse any of the following: Condition of nails and feet; color and temperature of toes, feet, and fingers. perform said procedures depending on restrictions needed and then documentation.</p> <p>✓ Assessment: observation, oral defense, quiz, self-assessment, critical thinking,</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3
<p>✓ Lab: Medical Mystery lab, students work together to solve a medical mystery- now known as Puerperal Fever. Guided questions are used to scaffold higher order thinking on the nature of science, medicine, and the scientific method.</p> <p>✓ Assessment: observation, oral defense, quiz, self-assessment, critical thinking, oral questioning essay</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3
<p>✓ Lab: Sunscreen and Skin lab, great introductory lab for students to link their vacation sunburn to the integumentary system! Students test the effectiveness of various sunscreens by using UV color-changing beads. Background information on UV light, UVA, UVB, melanin, and skin cancer provides for solid student comprehension.</p> <p>✓ Assessment: observation, oral defense, quiz, self-assessment, critical thinking, oral questioning</p>	1.0, 2.0, 6.0, 5.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3

Unit 9: Blood and Specimen Collecting and Testing	40 hours
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This chapter will discuss sputum, stool, and urine specimen gathering. Everyone can work as a team if the Patient Care Technician is given the task of collecting the samples while the nurse concentrates on implementing the patient's care plan. Display sensitivity to patient rights and feelings when collecting specimens. Explain the various means and methods used to collect urine specimens. Identify how to obtain a sputum specimen. Students will be provided the opportunity to learn the basic skills for the laboratory pathway. Discuss the legal and ethical responsibilities of the patient care technician who is assisting with specimen collection.

<ul style="list-style-type: none"> ● Microscope: parts and correct usage ● Disposal of biohazardous waste ● Urine collection, processing, testing ● Blood collection, processing, testing ● Explain why the stopper colors on evacuated blood collection tubes differ. 	<ul style="list-style-type: none"> ● Understand the purpose of routine urinalysis. ● Display sensitivity to patient rights and feelings when collecting specimens. ● Explain the various means and methods used to collect urine specimens. ● Instruct a patient in the collection of a 24-hour urine specimen.
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- State the correct order in which samples for various types of tubes should be collected.
- Describe and name the veins that may be used for blood collection.
- List in order the steps of a routine venipuncture.
- Collect a venous blood sample using the syringe method.
- Collect a venous blood sample using the evacuated blood collection tube method.
- Interpret results from laboratory tests
- Collection and labeling of laboratory specimens
- Instruct a patient in the collection of a clean-catch midstream urine specimen.
- Perform a complete urinalysis using a chemical reagent strip.
- Describe methods for determining fertility and menopause using Clinical Laboratory Improvement Amendments (CLIA)–waived urine tests.
- Discuss the steps in collecting a stool specimen.
- Identify how to obtain a sputum specimen.
- Discuss the legal and ethical responsibilities of the patient care technician who is assisting with specimen collection.

Standards Alignments:

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **A-SSE** A-CED 1, A-CED 4
NGSS: SEP 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1A, 1B; **LS** 1.A, B, C, D, 2.D,4.D;

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
<ul style="list-style-type: none"> ✓ Lab: CBC Blood Panel Analysis, students will use the internet to interpret the results of a REAL CBC Blood Panel Test to determine what each abbreviation stands for, what the test measures, which values are in normal ranges and which are not, and what the patient's diagnosis will be. ✓ Assessment: Charting, peer assessment, observation, written test, quiz, independent internet research essay 	1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.1, B 3.2, B 10.1, B 10.2, B 10.3, B 10.4, B 10.5, B 10.6
<ul style="list-style-type: none"> ✓ Lab: Working in pairs, students will collect, process, and test Synthetic blood specimens by using finger sticks on Mannequins for hematocrit, blood glucose, lipid panel and A1c testing. Also, students will perform venipunctures initially on mannequins before actuals on each other once they turn 18 years old. ✓ Assessment: Charting, peer assessment, observation, written test, quiz. Mannequin arm and hand puncture assessment, Blood from donated Vet science animal or synthetic 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.1, B 3.2
<ul style="list-style-type: none"> ✓ Key Assignment: Students will identify surgical instruments for surgical pack assembly and properly label packs for sterilization. ✓ Assessment: observation, oral questioning, oral defense, quiz 	1.0, 2.0, 6.0, 5.0, 7.0, 8.0, 9.0, 10.0	B 10.1, B 10.2, B 10.3

<ul style="list-style-type: none"> ✓ Key Assignment: Using a checklist by instructor, students will identify, properly handle and log the different anesthetic/local agents. Students will then write an essay on the adverse effects from the different anesthetic/local agents used in the hospital. ✓ Assessment: journaling, quiz, essay 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.4, B 10.5
<ul style="list-style-type: none"> ✓ Lab: Histology and Tissues lab, Students learn about Epithelial types of tissues and reinforces the types of tissues that can be found in the human body by creating a model through model building and a concept map from clay and macaroni and other types of pasta ✓ Assessment: oral questioning, oral defense, quiz, worksheet 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3, B 10.4, B 10.5
<ul style="list-style-type: none"> ✓ Lab: Students will collect and chart the results of urine, blood and fecal samples to analyze by using the appropriate test equipment. ✓ Assessment: oral questioning, oral defense, quiz, Blood, urine and Fecal donated from Vet science animal or synthetic 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3, B 10.4, B 10.5

Unit 10: Diagnostic Testing (Recurring) 40 hours

Students will be introduced to electrocardiography, and diagnostic imaging procedures. Students will collect and analyze laboratory specimens while using industry standard laboratory diagnostic equipment. Illustrate the electrical conduction system through the heart. Students will be able to explain the concepts of cardiac polarization, depolarization, and repolarization. Identify the PQRST complex on an electrocardiographic tracing. Discuss the legal and ethical issues involved when performing an electrocardiogram.

- Patient preparation for the ECG procedure
- Troubleshoot artifacts from ECG and prepare printout
- Care and proper use of laboratory equipment
- Electrode lead placements
- Diagnostic imaging procedures used to visualize internal body structures
- Introduction to: ultrasonography, computed tomography, magnetic resonance imaging, nuclear medicine
- Proper use of Electrocardiogram equipment

Standards Alignments:
CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9;
WS 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **A-SSE** A-CED 1, A-CED 4
NGSS: SEP 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1, 2, **LS** 1A, B, C

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
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<p>✓ Lab: In groups of three, students perform an ECG on mannequins 18 year olds can practice on another 18 year old student which will include patient preparation, lead placement, administering an ECG to industry standard while a third student observes and coaches.</p> <p>✓ Assessment: charting, peer assessment, observation, written test, quiz</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3
<p>✓ Lab: In teams, students will research which would be best used ECG or Holter monitor and which is required for each type of condition. Students will be given a variety of conditions and scenarios and must propose the proper positioning for each. Students will research, discuss and compare their findings with other groups. After comparison, students will self-correct any errors in their findings and produce a written document summarizing pros and cons style analysis of findings. Demonstrate Holter monitor procedure in a timed event.</p> <p>✓ Assessment: self and peer assessment, written documentation, observation, teamwork, quiz</p>	1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 4.5, B 8.1, B 12.0
<p>✓ Lab: Students will properly prepare and place a microscope slide on the stage of a microscope to identify microscopic tissues, chart their findings through illustration and journaling.</p> <p>✓ Assessment: observation, oral defense, quiz, self-assessment, journaling, oral questioning</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3
<p>✓ Key Assignment: Students will identify the parts and function of the microscope for proper handle, transport, use and maintenance of the equipment. These skills will be used throughout the remainder of the course.</p> <p>✓ Assessment: quiz, observation, quiz, essay</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 4.5, B 8.1, B 12.0

Unit 11: Pharmacology (Recurring) 40 hours

Students will have the opportunity to learn basic pharmacologic principles and demonstrate knowledge of federal and state health care legislation and regulations. Describe factors to consider in choosing routes of medication administration. Demonstrate the procedures for medication administration. They will also describe the correct techniques for administration of topical and rectal medications.

- Drug storage, handling and identification
- Classification of drugs
- Identification of common anesthetic agents
- Maintenance of anesthetic equipment
- Stages and complications of anesthesia
- Surgical instrument identification
- Guidelines for preparation and administration of oral and parenteral medications
- Uses of various drugs
- Abbreviations/written prescription interpretations
- Food and Drug Administration (FDA) as related to drugs
- Tuberculin and allergy testing
- Units of measurement of drugs (metric, apothecary and household system)
- Proper documentation techniques
- Controlled substances

- Pharmacy math

Standards Alignments:

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **A-SSE** 1, A-CED 1, A-CED 4 **NGSS: SEP** 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1, 2; **LS** 1A, B, C, D, 4D

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
<ul style="list-style-type: none"> ✓ Key Assignment: In collaborative groups, students will participate in a classroom scavenger hunt to find and identify different medications. Using a teacher provided graphic organizer the students will place them in the correct drug category. ✓ Assessment: observation, quick write, peer-assessment, 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	D 6.0, D 9.0
<ul style="list-style-type: none"> ✓ Lab: Utilizing Skittles, M&Ms or other candies as representations of various medications, students will graphically/visually express the meaning of fractions and provide examples of each type of fraction to a peer. Students will convert improper fractions to whole and mixed numbers, fractions to decimals and decimals to fractions, percent to decimals and decimals to percent, fractions to percent and percent to fraction simulating medication management. Students will determine the dosage and timing of their administered medications and will submit a “medication sheet” with hours and dosage calculations. ✓ Assessment: Students work in groups of three, discuss administering, prescribing, and dispensing, quiz, journaling, worksheet 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 1.2, B 3.1, B 3.2, B 5.0, B 6.0
<ul style="list-style-type: none"> ✓ Lab: lab Measurement activity, measurement is essential in the Medical Field. Students need to be able to perform measurements such as length, time, volume, density, and mass in order to investigate the world around them. Students will practice different measurements liquid/solid conversion ect. for assessing student ability to perform them with the use of graduated cylinders and sterile medication bottles. ✓ Assessment: observation, oral defense, quiz, self-assessment, journaling, oral questioning 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3
<ul style="list-style-type: none"> ✓ Lab: 3 medication lab activities, Students will use rational functions to determine the amount of medicine or anesthesia in a patient's bloodstream. Every minute of relief can count for something. Once medicine enters the bloodstream it will soon have its most powerful effect because it has its highest concentration. Over time the concentration reduces and once it reaches a certain level, the medicine will no longer be effective. 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 3.2, B 4.3, B 7.2, B 7.3

✓ Assessment: Observation, graph, oral defense, quiz, self-assessment, journaling, oral questioning		
✓ Key Assignment: Students will calculate dosages of different medications to properly fill and label a prescription. Students will also count tablets and capsules with a pill counter for practical training. ✓ Assessment: observation, demonstration, oral questioning, oral defense	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	D 6.0, D9.0
✓ Lab: Using ratio-proportion techniques and a variety of different colored juices, students will accurately calculate dosages of simulated liquid medications from a fictitious “physician sheet.” Students will decipher, calculate and dispense proper dosages. Following this exercise, students will generate 10 samples of medication orders to be displayed and evaluated by use of a “gallery walk.” ✓ Assessment: demonstration, peer-assessment, observation, gallery walk, Teacher-assessment	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 1.2, B 3.1, B 3.2, B 5.0, B 6.0

Unit 12: BLS, First Aid and AED (Recurring)	10 hours
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We partner with the American Heart Association. Students who successfully complete the training will receive a BLS card (Basic Life support.) They will have the opportunity to learn about various types of emergencies, their symptoms, treatments, safety precautions, and the Emergency Medical Services system. Students will also describe the patient care technician’s role in emergency response. Describe safe and appropriate methods for the application of safety reminder devices when caring for patients.

- Medical terminology associated with CPR, AED and first aid, Certification
- OSHA Standards for administering first aid
- Emergency care guidelines

Standards Alignments:
CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **A-SSE** A-CED 1, A-CED 4
NGSS: SEP 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1, 2; **LS** 1A, B, C, D, 4D

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
✓ Key Assignment: Working collaboratively, each group will brainstorm a mock emergency scenario involving a nurse and write a skit showing how it should be handled. Each group will perform their skit for their peers. The classroom audience will then provide feedback, praise and suggestions on how to better handle the situation. ✓ Assessment: perform theatrical skits, teacher observation, role play	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 6.0, B 7.2, B 7.3

<p>✓ Key Assignment: Workplace Violence, Violence does not always involve physical injury, especially in relation to workplace violence. The term workplace violence refers to any intense extreme behavior used to frighten, intimidate, threaten, or injure a person or damage or destroy property. Students will research and write an essay on risk factors in the workplace and how to understand and follow precautions.</p> <p>✓ Assessment: oral questioning, peer assessment, teacher observation, critical thinking, assessment, essay</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 6.0, B 7.2, B 7.3
<p>✓ Lab: Students will Identify the characteristics of each type of burn: superficial, partial thickness, and full thickness. They will discuss the characteristics and treatments for first, second and third-degree burns then teams will illustrate, label and color the layers and parts of the skin. Students will then demonstrate on a fellow student's arm (with a fake burn adhesive on) how to do emergency burn treatment.</p> <p>✓ Assessment: quiz, observation, peer assessment, self reflection, worksheet</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 9.1, B 9.3. B 9.6
<p>✓ Lab: After Basic Life Support (BLS) and First Aid training, students will perform CPR techniques on mannequins using the most current techniques and demo drugs. Students will demonstrate mastery and defend their technique. After the lab, the American Health Association Exam will be taken for Certification.</p> <p>✓ Assessment: observation, oral questioning, oral defense, Certification Exam</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 5.0, B 6.0, B 7.0, B 10.0, B 12.0, B 13.0

Unit 13: Emergency Procedures (Recurring)	10 hours
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Students will be exposed to key terms and guidelines associated with Code blue calls in a hospital setting using a crash cart. Students will summarize the typical emergency supplies and equipment. Demonstrate the use of an automated external defibrillator. Recognize and respond to life-threatening emergencies in the ambulatory care setting. Identify and assist a patient with an obstructed airway. Assist and monitor a patient who has fainted. Control a hemorrhagic wound. Discuss the legal and ethical concerns arising from medical emergencies.

- Preparation for emergency alerts “Code Blue”
- Sterile field maintenance
- Surgical assistant
- Postoperative patient care
- Surgical room clean-up
- Identify and recognize emergency equipment, supplies and medication

Standards Alignments:

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **NGSS: SEP** 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1A, 1B; **LS** 1A, B, C, D, 4D

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
<p>✓ Lab: Working in pairs, one student will assume the role of the nurse while the other will simulate the patient. Each will demonstrate their knowledge of the role of the Patient Care Technician, answering a Code blue call procedure through role play. They will each demonstrate mastery to the instructor and defend their choices.</p> <p>✓ Assessment: teacher’s observation, pair- share</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.1, B 10.5
<p>✓ Lab: Using CPR and choking skills learned from the previous unit, students will use a mannequin to demonstrate proper intubation and tracheal procedures, first to their peers for feedback/suggestions and then to instructor to assess for mastery. If possible final assessment will be done with cat cadavers, as this is the same method used in nursing programs.</p> <p>✓ Assessment: observation, oral questioning, oral defense, quiz, reflection essay</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.0, B 10.1, B 10.5
<p>✓ Lab: Diagnosis Lab, Students will use previous knowledge in the three key systems (Digestive, Respiratory, Circulatory) and background in additional systems (Nervous, Skeletal, Immune) to diagnose patients based on the case studies presented here. In groups of 3-5, one student will play a 'patient' and present a case of some illness and patient background. Another student, acting as the primary physician will diagnose him/her based on the information provided. The other student’s will provide support, and along with their notes, the primary physician will present the case to the teacher. Students will be graded on their presentation as a patient but primarily on their diagnosis using their classmates and notes as resources.</p> <p>✓ Assessment: observation, oral questioning, oral defense, peer assessment, reflection essay</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.0, B 10.1, B 10.5
<p>✓ Key Assignment: Students will participate in a classroom scavenger hunt to identify the emergency drugs and correctly categorize them using the proper emergency log.</p> <p>Assessment: quick write, quiz, journaling</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.0, B 10.1, B 10.5
<p>✓ Key Assignment: Students will identify the classroom CRASH cart contents, discuss with a partner the functions and create an inventory list. Students will rotate through the job of keeping the inventory stocked and recorded.</p> <p>✓ Assessment: journaling, quiz, oral questioning, oral defense</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.0, B 10.1, B 10.5

<p>✓ Key Assignment: Using actual surgical instruments, students will identify and give written explanations for the use and care of instruments commonly used for surgery. This will be documented in the interactive notebook for future reference in class and on internship/job shadow.</p> <p>✓ Assessment: rubric, peer assessment, teacher observation, vocabulary test</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 5.0, B 6.0, B 7.0, B 10.0, B 12.0, B 13.0
<p>✓ Lab: Students will individually document the purpose of and procedure for the following surgical operations: sebaceous cyst removal, Polyp biopsy, and skin tag tumor removal including a list of sterile field items necessary for the procedure. Students will then prepare each surgical procedure tray set up, and patient preparation for the instructor in a timed setting.</p> <p>✓ Assessment: Teacher observation, peer - share, vocab matching quiz, essay</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 10.0	B 10.0, B 10.1, B 10.5

Unit 14: End-of-Life Care (Recurring)	10 hours
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Students will be learning about the Hospice care that is provided to people with terminal illnesses (diseases in an advanced state with no known cure and a poor prognosis) and their families in order to provide care and support. As the end draws near, an interdisciplinary team promotes quality of life by providing comfort, care, and support with empathy, interest, and sincere concern. The patient and family can understand that dying is a natural part of living with hospice support. The patient should remain as comfortable as feasible in the home or setting of his or her choice in order to maximize quality of life.

- Discuss the philosophy of hospice care.
- Differentiate between palliative and curative care.
- Discuss four criteria for admission to hospice care.
- Name the members of the interdisciplinary team, and explain their roles.
- Describe the stages of dying.
- Describe the role of the patient care technician in providing postmortem care.
- Discuss the role of hospice in families' bereavement period.
- Discuss two ethical issues in hospice care.

Standards Alignments:
CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **NGSS:** SEP 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1A, 1B, **LS** 1A, B, C, D, 4D

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
<p>✓ Key Assignment: Students will create a care plan, Prompt; You are a registered nurse working in a palliative care unit and have been assigned a patient who has been diagnosed with a terminal illness. Develop a comprehensive care plan for this patient</p>	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 10.0	B 5.0, B 6.0, B 7.0, B 10.0, B 12.0, B 13.0

<p>that addresses their physical, emotional, and spiritual needs during this time. Your care plan should include assessments of their pain and symptom management, as well as interventions to promote comfort, communication, and support for both the patient and their family. Additionally, your plan should address the patient's goals of care and any cultural or religious considerations that may impact their care.</p> <p>✓ Assessment: observation, self-assessment, oral questioning, reflection essay</p>		
<p>✓ Lab: Documentation of End-of-Life Care, Students will role play in pairs to fill out forms as Patient Care Techs to complete necessary documentation for deceased patients. Time of death and actions taken to prevent the death if applicable are: Who pronounced the death of the patient, any special preparation and type of donation. Including time, staff, and company, who was called and who came to the hospital: donor organization, morgue, funeral home, chaplain, or individual family members making any decisions, personal articles left on the body and taped to skin or tubes left in. Personal items given to the family and specific names and description of items. Time of discharge and destination of the body, Location of name tags on the body, Special requests by the family. Any other personal statements that might be needed to clarify the situation.</p> <p>✓ Assessment: observation, self-assessment, oral questioning, reflection essay</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 10.0</p>	<p>B 5.0, B 6.0, B 7.0, B 10.0, B 12.0, B 13.0</p>
<p>✓ Lab: Care of the Body After Death, Students will learn how to delegate and document when to notify the nurse if the patient’s symptoms worsen or change in nature, potential adverse effects of medications and what to report to the nurse, the need to maintain communication with dying patients who still retain the sense of hearing. Students will then demonstrate removal of all tubing and other devices from the patient's body. Place the patient in supine position. Elevate the head. Do not place one hand on top of the other. Replace soiled dressings with clean ones. Bathe patient as necessary. Brush or comb hair. Apply a clean gown. Care for valuables and personal belongings. If the wedding band is to remain on the deceased, secure ring to finger with a small strip of tape over ring. Allow the family to view the body and let them remain in the room. A sheet or light blanket placed over the body with only the head and upper shoulders exposed maintains dignity and respect for the deceased. Remove unneeded equipment from the room. Provide soft lighting, and offer chairs. After the family has left the room, attach a special label if the patient had a contagious disease. Close the door to the room. Await arrival of ambulance, or transfer to morgue. (Some</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 10.0, B 10.1, B 10.5</p>

<p>facilities use a shroud to enclose the body before transfer to the morgue. Document the procedure and disposition of the patient's body and of belongings and valuables.</p> <p>✓ Assessment: observation, oral questioning, oral defense, quiz, reflection essay</p>		
<p>✓ Lab: End-of-Life Care: Palliative Care and Comfort Measures, The objective of this lab is to develop the students' knowledge and skills in providing palliative care and comfort measures to patients at the end of their lives. Students will pick a random case study, analyze the patient's end of life case and conduct a bedside assessment of a patient at the end of their life, and document the findings. Develop a care plan for a patient at the end of their life, including interventions for pain and symptom management, emotional support, and spiritual care. Implement the care plan and evaluate the effectiveness of the interventions. Reflect on the experience and discuss the challenges and successes encountered during the implementation of the care plan.</p> <p>✓ Assessment: observation, self-assessment, oral questioning, oral defense, development of a comprehensive care plan, completeness of the bedside assessment and documentation, Effectiveness of the interventions implemented</p>	<p>1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 10.0</p>	<p>B 5.0, B 6.0, B 7.0, B 10.0, B 12.0, B 13.0</p>

Unit 15: Nutrition (Recurring)	10 hours
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Students will learn the importance of proper nutrition, how to assist feed patients and make sure patients are maintaining their proper liquid intake and outtake. As the student will be learning the role of Patient Care Technician, They have numerous chances to assist patients in meeting their nutritional needs because of the length of time they spend receiving care from the Patient Care Technician. The Patient Care Technician may be in charge of helping a patient to consume, keeping track of the patient's intake, and alerting the nurse to any dietary concerns. Students will Identify the different types of feeding tubes. Discuss the elements to consider when feeding a patient. Outline the procedure for initiating and discontinuing an intravenous line.

<ul style="list-style-type: none"> ● Dignity ● Humane care ● Discuss the cultural factors that may affect a patient's nutritional status. ● Discuss the proper procedure for calculating a patient's intake and output. ● Identify the different types of feeding tubes. ● Discuss the elements to consider when feeding a patient. 	<ul style="list-style-type: none"> ● Waste management ● Nutritional needs & functions ● Outline the variations in nutrition according to developmental stage. ● Explain the purpose of water and its importance in maintaining hydration. ● Discuss the patient care technician's role in assistance with nutrition and fluid balance.
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Standards Alignments:

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **A-SSE** A-CED 1, A-CED 4 **RLST** 11-12.3, 11-12.4; **WS** 11-12.4, 11-12.7, 11-12.8, 11-12.9, 11-12.10 **NGSS: SEP** 1, 3, 4, 5,6 7, 8; **PS** 1; **LS** 1A, 1B, 1C, 1D;

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
<ul style="list-style-type: none"> ✓ Key Assignment: Students will pair up and research two different hospitals anywhere in the United States. They will collect information regarding food services for patients and service costs for the patient. As a public service, each student will be required to inform at least two family members or friends regarding the information collected. ✓ Assessment: Pair share, oral presentation, oral defense, quiz 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 5.0, B 6.0, B 7.0, B 10.0, B 12.0, B 13.0
<ul style="list-style-type: none"> ✓ Lab: Food Planning Lab students work through pre, during, and post lab. From organizing ingredients and planning responsibilities for each student in a group, to identifying MyPlate food groups and reviewing the final presentation, this form will force students to think through food labs in greater detail. ✓ Assessment: Observation, oral questioning, oral defense, quiz, critical thinking 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 10.0	B 10.0, B 10.1, B 10.5
<ul style="list-style-type: none"> ✓ Lab: Investigative lab activity to help students understand the presence of macromolecules in different foods that we eat. Students will solve a murder mystery using their knowledge of macromolecules, analyzing the presence of macromolecules in different meals and will then test for the presence of these macromolecules in the evidence sample from the scene of the crime. Students will use this information to determine the murderer and answer analysis questions. ✓ Assessment: Observation, oral questioning, oral defense, quiz, reflection essay 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.0, B 10.1, B 10.5
<ul style="list-style-type: none"> ✓ Lab: Digestion and Liver Enzyme Lab, Students learn about the physiology of the digestive system using a sandwich bag to simulate digestion Functions of salivary glands. Simulation of peristalsis using tennis ball and pantyhose. Chemical digestion of alimentary canal and accessory organs and Liver catalase reaction (hydrogen peroxide.) ✓ Assessment: Observation, oral questioning, oral defense, handout, critical thinking 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.0, B 10.1, B 10.5
<ul style="list-style-type: none"> ✓ Lab: Water Osmosis Diffusion Lab explores how the solute concentration gradient affects the rate of diffusion and osmosis. Students will quantitatively determine the rate of diffusion, graph the data, and use the graph to predict the answers to new questions. ✓ Assessment: Observation, oral questioning, oral defense, quiz, critical thinking, reflection essay 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.0, B 10.1, B 10.5

<ul style="list-style-type: none"> ✓ Lab: Taco Protein Synthesis Lab, the process of protein synthesis using a creative way of doing so---with taco fixings, Students use markers, colored pencils, and construction paper to add color to their final product. Students understand the significance of protein synthesis and practice in finding the mRNA and amino acid. ✓ Assessment: Observation, oral questioning, oral defense, quiz, critical thinking 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 10.0, B 10.1, B 10.5
<ul style="list-style-type: none"> ✓ Key Assignment: Students will participate in an “open fishbowl” discussion or similar activity regarding the importance of a well balanced diet. A pre and post opinion survey and reflective journal entry will be required from each student. ✓ Assessment: observation, questioning, oral defense, journaling, worksheet, reflection essay 	1.0, 2.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0	B 5.0, B 6.0, B 7.0, B 10.0, B 12.0, B 13.0
<ul style="list-style-type: none"> ✓ Key Assignment: Students will research and prepare recipes for healthy, homemade treats. They will prepare a shopping list of ingredients necessary, appropriately measure ingredients and calculate nutritional value of each snack. ✓ Assessment: Observation, pair share, journaling, quick write, worksheet 	1.0, 2.0, 4.0, 5.0, 6.0, 7.0, 8.0, 10.0	B 5.0, B 6.0, B 7.0, B 10.0, B 12.0

Unit 16: Job Shadow/Internship	120 hours
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Students meeting all requirements for an internship will have the opportunity to practice their Patient Care skills in a medical setting within the community during their second semester. Student internships are designed to be completed in a hospital, extended care facility, rehabilitation center, Hospice, skilled nursing facility, or other health care or research facility. Requirements must be met and cleared by the instructor prior to internship placement. This 120 hour unit consists of Work experience opportunities at designated site(s).

The requirements for this are:

- Good attendance (no more than 5 absences per semester)
- Professional attitude with professional appearance
- “B” or better grade with completion of all required lab skills
- Completed physical examination- 2 months prior to starting
- Hepatitis B vaccine series recommended
- TB skin test-2 months prior to starting
- Flu shot and/or Covid vaccine may be required
- Good dexterity skills
- All required forms completed
- Clinical site agreement (may be completed 2 months prior to the start date)
- CPR required

CCSS: LS 11-12.1, 11-12.2, 11-12.3, 11-12.4, 11-12.5, 11-12.6; **RSIT** 11-12.4, 11-12.5, 11-12.7; **RRLST** 11-12.3, 11-12.4, 11-12.5, 11-12.8, 11-12.9; **WS** 11-12.2, 11-12.4, 11-12.6, 11-12.7; **WHSST** 11-12.4, 11-12.5, 11-12.6, 11-12.8, 11-12.9; **NGSS:** SEP 1, 2, 3, 4, 5, 6, 7, 8; **PS** 1, 2; **LS** 1A, B, C, D, 4D

Key Assignments	CTE Anchor Standards	CTE Pathway Standards
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<p>✓ Lab: Under the supervision of an SVCTE instructor, students will be placed in a medical facility and assist as the Patient care technician role and as a member of the team working with patients while gaining real-world and hands-on experience in the medical field. This internship will last for 120 hours, students will also practice standards for job preparation, such as fundamental academic abilities, interpersonal and communication skills, problem-solving abilities, workplace safety, technology, and employment literacy, which are woven throughout the internship experience.</p> <p>✓ Assessment: Weekly time card, work supervisor comments, visitation by the teacher, mid evaluation and final evaluation, reflection essay.</p>	<p>1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0</p>	<p>B 1.0, B 2.0, B 4.0, B 5.0, B 6.0, B 7.0, B 8.0, B 11.0, B 12.0, B 13.0</p>
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Instructional Materials

Textbooks:	Electronic Media/Supplemental Print Materials/Online Resources:
<ul style="list-style-type: none"> ● <u>Mosby's Textbook for Nursing Assistants</u> 10th edition Sheila A. Sorrentino, PhD, RN and Leighann Remmert, MS, RN 2021 ISBN: 978-0-32-365561-3 ● <u>Fundamental Concepts and Skills for the Patient Care Technician</u> 2nd edition Kimberly Townsend, PhD, RN, WHNP-BC, CNE 2023 ISBN: 978-0-32-379485-5 ● <u>Workbook for Fundamental Concepts and Skills for the Patient Care Technician</u> 2nd edition Kimberly Townsend, PhD, RN, WHNP-BC, CNE 2023 ISBN: 978-0-32-383128-4 ● <u>CNA: Nursing Assistant Certification, California Edition</u> Dr. Carrie L. Jarosinski RN, CNE, CWP, August Learning Solutions 2020 ISBN: 978-1-941626-03-0 ● <u>CNA: Nursing Assistant Certification, California Edition Workbook</u> 	<ul style="list-style-type: none"> ● Center for Disease Control and Prevention: www.cdc.gov ● Department of Health: http://www.doh.gov.ph/ ● Medical Board of California: https://www.mbc.ca.gov/ ● California Board of Registered Nursing: https://www.rn.ca.gov/ ● California Board of Vocational Nursing and Psychiatric Technicians: https://www.bvnpt.ca.gov/ ● California Department of Public Health: https://www.cdph.ca.gov/ ● YouTube ● Kahoot! ● Textbook ● Quizlet ● Notes ● Simulations ● Procedure Videos

<p>Lisa Rae Whitley, RN, August Learning Solutions 2020 ISBN: 978-1-941626-16-0</p> <ul style="list-style-type: none"> • <i>The Living Language Medical Terminology</i> 4th Edition Fregman & Frucht – Pearson 2021 ISBN: 978-0-13-284347-8 	
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Standards Assessed in this Course

- CTE Anchor Standards:**
- 1.0 Academics: Academics standards are aligned to pathways; see below.
 - 2.0 Communications: Acquire and use accurate sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.
 - 3.0 Career Planning and Management: Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans.
 - 4.0 Technology: Use existing and emerging technology, to investigate, research, and produce products and services, including new information, as required in the sector workplace environment.
 - 5.0 Problem Solving and Critical Thinking: Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques.
 - 6.0 Health and Safety: Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the sector workplace environment.
 - 7.0 Responsibility and Flexibility: Initiate, and participate in, a range of collaborations demonstrating behaviors that reflect personal and professional responsibility, flexibility, and respect in the sector workplace environment and community settings.
 - 8.0 Ethics and Legal Responsibilities: Practice professional, ethical, and legal behavior, responding thoughtfully to diverse perspectives and resolving contradictions when possible, consistent with applicable laws, regulations, and organizational norms.
 - 9.0 Leadership and Teamwork: Work with peers to promote divergent and creative perspectives, effective leadership, group dynamics, team and individual decision making, benefits of workforce diversity, and conflict resolution.
 - 10.0 Technical Knowledge and Skills: Apply essential technical knowledge and skills common to all pathways in the sector following procedures when carrying out experiments or performing technical tasks.

- Health Science and Medical Technology Sector — Patient Care Pathway Standards:**
- B1.0 Recognize the integrated systems approach to health care delivery services: prevention, diagnosis, pathology, and treatment**
- B1.1 Know the relationship and use of an integrated healthcare delivery system.

- B1.2 Understand the range between prevention, diagnosis, pathology, and treatment procedures.
- B1.3 Understand the significance of nontraditional approaches to health care in relationship to delivery systems.
- B1.4 Illustrate the value of preventive and early intervention in relationship to health care practices.
- B1.5 Describe the importance of reimbursement systems in relationship to the delivery of patient care.
- B2.0 Understand the basic structure and function of the human body and relate normal function to common disorders.**
- B2.1 Know basic human body structure and function in relationship to specific care between prevention, diagnosis, pathology, and treatment.
- B2.2 Describe basic stages of growth and development.
- B2.3 Recognize common diseases and disorders of the human body.
- B2.4 Compare normal function of the human body to the diagnosis and treatment of disease and disorders.
- B3.0 Know how to apply mathematical computations used in health care delivery systems.**
- B3.1 Apply mathematical computations related to health care procedures (metric and household, conversions and measurements).
- B3.2 Analyze diagrams, charts, graphs, and tables to interpret health care results.
- B3.3 Record time using the 24-hour clock.
- B4.0 Recognize and practice components of an intake assessment relevant to patient care.**
- B4.1 Conduct basic interviews to acquire new knowledge (e.g., medical and family histories).
- B4.2 Identify and summarize major life events as they impact health care practices and patient outcomes.
- B4.3 Observe patient actions, interests, and behaviors while documenting responses.
- B4.4 Collect and synthesize information or data about the patient's symptoms and vital signs.
- B4.5 Evaluate information gathered and connect patient data to appropriate systems of care.
- B5.0 Know the definition, spelling, pronunciation, and use of appropriate terminology in the healthcare setting.**
- B5.1 Use medical terminology in patient care appropriate to communicate information and observations.
- B5.2 Accurately spell and define occupationally specific terms related to health care.
- B5.3 Use roots, prefixes, and suffixes to communicate information.
- B5.4 Use medical abbreviations to communicate information.
- B5.5 Know the basic structure of medical terms.
- B5.6 Demonstrate the correct pronunciation of medical terms.
- B5.7 Practice word building medical terminology skills.
- B6.0 Communicate procedures and goals to patients using various communication strategies to respond to questions and concerns.**
- B6.1 Observe and document the ability of patients to comprehend and understand procedures and determine how to adjust communication techniques.
- B6.2 Use active listening skills (e.g., reflection, restatement, and clarification) and communication techniques to gather information from the patient.
- B6.3 Formulate appropriate responses to address the patient's concerns and questions in a positive manner.

- B6.4 Employ sensitivity and withhold bias when communicating with patients.
- B6.5 Report patient's progress and response to treatment goals.
- B6.6 Maintain written guidelines of the Health Insurance Portability and Accountability Act (HIPAA) in all communications.
- B7.0 Apply observation techniques to detect changes in the health status of patients.**
- B7.1 Demonstrate observation techniques.
- B7.2 Differentiate between normal and abnormal patient health status.
- B7.3 Document the patient findings and report information appropriately.
- B7.4 Plan basic care procedures within the scope of practice to assist with patient comfort.
- B8.0 Demonstrate the principles of body mechanics as they apply to the positioning, transferring, and transporting of patients.**
- B8.1 Explain the principles of body mechanics.
- B8.2 Determine appropriate equipment for transportation and transfer, including the modification of equipment and techniques to accommodate the health status of the patient.
- B8.3 Demonstrate appropriate transport and transfer methods to accommodate the health status of the patient.
- B8.4 Evaluate equipment for possible hazards.
- B8.5 Integrate proper body mechanics, ergonomics, safety equipment, and techniques to prevent personal injury to patients and clients.
- B9.0 Implement wellness strategies for the prevention of injury and disease.**
- B9.1 Know and implement practices to prevent injury and protect health for self and others.
- B9.2 Determine effective health and wellness routines for health care workers (i.e., stress management, hygiene, diet, rest, and drug use).
- B9.3 Identify practices to prevent injuries and protect health, for self and others (i.e., seatbelts, helmets, and body mechanics).
- B9.4 Know how to access available wellness services (i.e., screening, exams, and immunizations).
- B9.5 Identify alternative/complementary health practices as used for injury and disease prevention.
- B9.6 Explore consequences of not utilizing available wellness services and behaviors that prevent injury and illness.
- B10.0 Comply with protocols and preventative health practices necessary to maintain a safe and healthy environment for patients, health care workers, co-workers, and self within the healthcare setting.**
- B10.1 Describe the infection control cycle with consideration of the various types of microorganisms.
- B10.2 Demonstrate use of facility policies and procedures of infection control while performing patient care.
- B10.3 Evaluate potential causes and methods of transmitting infections and how to apply standard precaution guidelines.
- B10.4 Demonstrate the use of appropriate personal protective equipment (PPE).
- B10.5 Practice proper hand hygiene.
- B10.6 Use various manual and mechanical decontamination and sterilization techniques and procedures.
- B10.7 Document and analyze sanitation and infection control procedures.
- B11.0 Comply with hazardous waste disposal policies and procedures, including documentation, to ensure that regulated waste is handled, packaged, stored, and disposed of in accordance with federal, state, and local regulations.**
- B11.1 Describe basic emergency procedures used to respond to a hazardous spill.

- B11.2 Explain how waste is handled, packaged, stored, and disposed of in accordance with federal, state, and local regulations including hazardous chemicals, biohazards, and radioactive materials.
- B11.3 Adhere to the healthcare setting’s waste management program (e.g., recycling and reduction of regulated medical, solid, hazardous, chemical, and radioactive waste materials).
- B11.4 Apply protective practices and procedure for airborne and blood-borne pathogens for equipment and facilities and identify unsafe conditions for corrective action.
- B12.0 Adhere to the roles and responsibilities, within the scope of practice, that contribute to the design and implementation of treatment planning.**
- B12.1 Understand scope of practice and related skills within prevention, diagnosis, pathology, and treatment occupations.
- B12.2 Describe the various roles and responsibilities of health care workers as team members in an integrated health care delivery system
- B12.3 Demonstrate the knowledge and delivery of specific skills and procedures as outlined within the scope of practice appropriate for patient care in prevention, diagnosis, pathology, and treatment.
- B12.4 Follow appropriate guidelines for implementation of various procedures.
- B13.0 Research factors that define cultural differences between and among different ethnic, racial, and cultural groups and special populations.**
- B13.1 Utilize culturally appropriate community resources.
- B13.2 Recognize complementary and alternative medicine as practiced within various cultures.
- B13.3 Develop ethnographic skills, by location and information retrieval, carefully observe social behavior, and manage stress and time.
- B13.4 Ask questions and explore aspects of global significance.
- B13.5 Analyze data using relevant concepts.
- B13.6 Know when and how to incorporate trained interpreters to facilitate communication and improve patient outcomes.

Common Core State Standards:

Language Standards – LS – (Standard Area, Grade Level, Standard #)

- LS 11-12.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- LS 11-12.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
- LS 11-12.3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
- LS 11-12.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies.
- LS 11-12.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
- LS 11-12.6 Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Reading Standards for Informational Text – RSIT – (Standard Area, Grade Level, Standard #)

- RSIT 11-12.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text.
- RSIT 11-12.5 Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.
- RSIT 11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

Reading Standards for Literacy in Science and Technical Subjects – RRLST – (Standard Area, Grade Level, Standard #)

- RLST 11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
- RLST 11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.
- RLST 11-12.5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
- RLST 11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.
- RLST 11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

Writing Standards – WS – (Standard Area, Grade Level, Standard #)

- WS 11-12.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
- WS 11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- WS 11-12.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
- WS 11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects – WHSST – (Standard Area, Grade Level, Standard #)

- 11-12.4 Produce clear and coherent writing in which the development, organization, and A1.0 style are appropriate to task, purpose, and audience.
- 11-12.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

- 11-12.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
 - 11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
 - WSHSS 11-12.9 Draw evidence from informational texts to support analysis, reflection, and research.
- Algebra – A-SSE – Seeing Structure in Expressions**
- A-SSE1 Interpret expressions that represent a quantity in terms of its context.
 - a. Interpret parts of an expression, such as terms, factors, and coefficients.
 - A-CED 1 Create equations and inequalities in one variable and use them to solve problems.
 - A-CED 4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.

Next Generation Science Standards:

Scientific and Engineering Practices

- SEP 1 Asking questions (for science) and defining problems (for engineering)
- SEP 2 Developing and using models
- SEP 3 Planning and carrying out investigations
- SEP 4 Analyzing and interpreting data
- SEP 5 Using mathematics and computational thinking
- SEP 6 Constructing explanations (for science) and designing solutions (for engineering)
- SEP 7 Engaging in argument from evidence
- SEP 8 Obtaining, evaluating, and communicating information

Disciplinary Core Ideas: Life Sciences

- LS 1A From Molecules to Organisms: Structure and Function
- LS 1B From Molecules to Organisms: Growth and Development of Organisms
- LS 1C From Molecules to Organisms: Organization for Matter and Energy Flow in Organism
- LS 1D From Molecules to Organisms: Information Processing
- LS 3A Inheritance of Traits
- LS 3B Variation of Traits
- LS 4D Biological Evolution: Biodiversity and Humans

Disciplinary Core Ideas: Physical Sciences

- PS 1 Structure and Properties of Matter
- PS 2 Forces of Motion