Bristol Public Schools

Office of Teaching & Learning

Department	Career and Technical Education (CTE)
Department Philosophy	Bristol schools believe in providing students with rich opportunities to ensure career and college readiness. These opportunities include development of skills, practices, and exploration within several career clusters and pathways. Each CTE curriculum enables students to acquire and strengthen leadership, literacy, numeracy, decision-making, computer skills, and technology skills through 11 career clusters and pathways: (1) architecture and construction, (2) business management, (3) education and training, (4) finance, (5) health science, (6) hospitality and tourism, (7) information technology, (8) manufacturing, (9) marketing, (10) transportation, distribution and logistics, and (11) STEM. Each career cluster provides students with access to hand-on experiences that will allow for students development of skills that will support successful transition to their post secondary experiences.
Course	ECE Medical Terminology
Course Description for Program of Studies	Medical terminology is a full year course designed to develop language that will support students as they pursue a career or major in the health sciences. This course showcases medical language through the lens of each body system. As students navigate each body system, they build an understanding of the prefix, suffix and combine forms related to the system, as well as the terms associated with common pathologies and diagnostics for that system. This course embeds multiple hands-on and virtual lab experiences to enhance their knowledge and class experience. Students will be expected to research and share their findings through case studies, projects, models, written and/or oral reports and presentations.
Grade Level	11-12
Pre-requisites	Suggested-Successful completion of Biology and Anatomy and Physiology, Foundations in Health Sciences (coming 2021), Healthcare Skills and Practices (coming 2022)
Credit (if applicable)	BPS 1.0, UConn 2.0

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P indicates standard will be a priority for the unit; S indicates a supporting standard

ADVANCE CTE Standards	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
HL DIA 1.0 Communicate information with a healthcare environment and convey key diagnostic information to healthcare workers and patients in an accurate and timely manner.	X	X	X	X	X	X	X	X	X	X	X	X	
HLC02 Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.	X	X	X	X	X	X	X	X	X	X	X	X	X
HL 1.0 Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career.	X	X	X	X	X	X	X	X	X	X	X	X	X

UNIT 1: Basic Word Structure and Terms Related to the Human Body			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HL DIA 1.0 Communicate information with a healthcare environment and convey key diagnostic information to healthcare workers and patients in an accurate and timely manner.	HL DIA 1.1 Employ effective oral communication techniques when communicating diagnostic information with departments and professionals. ● *Assess the appropriate communication techniques based on the other's ability to understand.* ● *Apply active listening skills using reflection, restatement and clarification.* ● *Demonstrate courtesy to others, including self introduction.* ● *Interpret verbal and nonverbal behaviors to augment communication within scope of practice.* ● *Demonstrate interviewing skills.*	● Positional and directional terms ● Structural organization of the body ● Body Cavities ● Abdominopelvic regions and quadrants ● Divisions of the spinal column	anterior , posterior, deep, superficial, proximal, distal, inferior, superior, medial, lateral, supine, prone,anabolism, catabolism, cell membrane,chromosomes, cytoplasm, DNA, endoplasmic reticulum, genes, karyotype, metabolism, mitochondria, nucleus, adipose tissue, cartilage, epithelial cells, histologist, larynx, pharynx, pituitary gland, thyroid gland,trachea, ureter, urethra, uterus, viscer, abdominal cavity, cranial cavity, diaphragm, dorsal, mediastinum, pelvic cavity, peritoneum, pleura, pleural cavity, spinal cavity, thoracic cavity, ventral
HL DIA 1.0 Communicate information with a healthcare environment and convey key diagnostic information to healthcare workers and patients in an accurate and timely manner.	HL DIA 1.2 Employ effective written communication techniques when communicating diagnostic information with departments and professionals. ● *Identify correct syntax and grammar appropriate to patient/client.* ● *Report relevant information in a timely manner.* ● *Distinguish between subjective and objective information when reporting.* ● *Analyze communication for appropriate response and provide feedback.* ● *Organize, write and compile technical information and summaries.* ● *Use medical terminology in order to interpret, transcribe and communicate information, data and observations*	● Word analysis ● Suffix ● Prefix ● Combining forms ● Pronunciation	Root, combining vowel, prefix, suffix, combining form
HLC02 Use oral and written communications skills in creating, expressing, and interpreting	N/A		

information and ideas including technical terminology and information.			
HL 1.0 Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career.	HL 1.1: Utilize knowledge of human structure and function to conduct health care roles. ● *Describe the basic structures and functions of cells, tissues, organs and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities.* ● *Analyze the interdependence of the body systems as they relate to wellness, disease, disorders, therapies and care rehabilitation.*	● Positional and directional terms ● Structural organization of the body ● Body Cavities ● Abdominopelvic regions and quadrants ● Divisions of the spinal column	anterior , posterior, deep, superficial, proximal, distal, inferior, superior, medial, lateral, supine, prone,anabolism, catabolism, cell membrane,chromosomes, cytoplasm, DNA, endoplasmic reticulum, genes, karyotype, metabolism, mitochondria, nucleus, adipose tissue, cartilage, epithelial cells, histologist, larynx, pharynx, pituitary gland, thyroid gland,trachea, ureter, urethra, uterus, viscer, abdominal cavity, cranial cavity, diaphragm, dorsal, mediastinum, pelvic cavity, peritoneum, pleura, pleural cavity, spinal cavity, thoracic cavity, ventral

UNIT 1: Basic Word Structure and Terms Related to the Human Body

Studying medical terminology is similar to learning a new language. The strange and complicated verbiage can be broken down to obtain meaning. This unit provides students with the background knowledge to support greater understanding of medical terms as they progress through the unit and course.
Essential Questions:

- *What information can you elicit from a medical term?*
- *What are the component parts of a medical term?*

<table>
<tr><th>CTE Standard</th><th>Learning Targets: I can</th><th>Summative Assessment Strategy</th><th>Lesson Progression and Connection to ELA/Math CCSS</th><th>Common Learning Experiences and Assessments</th></tr>
<tr><td>HL DIA 1.0
HLC02</td><td>● I can divide medical words into their component parts.
● I can analyze words by dividing them into component parts.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td></td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Use medical terminology in order to interpret, transcribe and communicate information, data and observations.
● Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.</td><td>Mandatory Lessons/Activities:
● Students break down words into combining form, prefix and suffix, define each, then define word as a whole
● Complete chapter review Page 17,A,B,C. Check your answers on page 24.</td></tr>
<tr><td>Pacing:</td><td>1 blocks (90 min blocks)</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● Students can write a medical scenario illustrating the role of medical specialists
● Students can translate a medical case into appropriate medical terms</td></tr>
<tr><td>HL DIA 1.0
HLC02</td><td>● I can learn and apply the meanings of the basic prefixes of the medical language.
● I can learn and apply meanings of the basic suffixes of the medical language.</td><td><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Use medical terminology in order to interpret, transcribe and communicate information, data and observations.
● Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.</td><td>Mandatory Lessons/Activities:
● Complete chapter review page 18 D,E,F,G,H check answers page 24
● Students can break down medical words into parts and determine meaning https://www.cipcourses.com/resources/what-is-medical-ter</td></tr>
</table>

<table>
<tr><td></td><td></td><td rowspan="3"></td><td></td><td>minology/</td></tr>
<tr><td>Pacing:</td><td>1 block</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● Students will choose a specialized cell in the body and create a poster of the cell illustrating the structure and function of the cell</td></tr>
<tr><td>HL DIA 1.0
HLC02</td><td>● I can use the combining forms, prefixes, and suffixes to build medical words.
● I can learn the meanings of basic combining forms, suffixes, and prefixes of the medical language.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td></td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Use medical terminology in order to interpret, transcribe and communicate information, data and observations.
● Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.</td><td>Mandatory Lessons/Activities:
● Complete chapter review page 22 M, check answers page 25
● Students can apply knowledge of combining forms to decode new words</td></tr>
<tr><td>Pacing:</td><td>1 blocks</td><td>CCSS Connections:
●</td><td>Assessments:
● UConn Practice Assessment (2021-22)</td></tr>
<tr><td>HL DIA 1.0
HLC02
HL 1.0</td><td>● I can relate medical terms to the structure and function of the human body.
● I can define the terms that apply to the structural organization of the body.
● I can identify the body cavities and recognize the organs contained within those cavities
● I can be aware of the impacts related to pronunciation and spelling problems of the medical language.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Use medical terminology in order to interpret, transcribe and communicate information, data and observations.
● Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.
● Describe the basic structures and functions of cells, tissues, organs and systems as they relate to homeostasis.</td><td>Mandatory Lessons/Activities:
● Complete chapter review page 61-62A-E, check answers page 66-67
● Virtual Human Body Cavity Scavenger Hunt</td></tr>
<tr><td>Pacing:</td><td>1 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.11-12.4-Determine the meaning of symbols, key terms, and other</td><td>Assessments:
● Students will choose and “emia” and create a slide with</td></tr>
</table>

			domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	*pictures illustrating the meaning of the word* ● *Students will describe a body system in terms of hierarchy of the body. The students will describe the function of this system and how it relates to maintaining homeostasis*
HL DIA 1.0 HLC02 HL 1.0	● *I can locate and Identify the anatomic and clinical divisions of the body* ● *I can locate and name the divisions of the back.*	<table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table>	**Lesson Progression and Standards Connection:** ● *Use medical terminology in order to interpret, transcribe and communicate information, data and observations.* ● *Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.* ● *Describe the basic structures and functions of cells, tissues, organs and systems as they relate to homeostasis.*	**Mandatory Lessons/Activities** ● *Students can identify the major body cavities and associated organs* ● *Students can identify the major components of the cell* ● *Students will compare/contrast a normal karyotype to an abnormal karyotype* ● *Forensic file*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** *Students will translate a medical case from slang terms to medical terms*
HL DIA 1.0 HLC02 HL 1.0	● *I can become acquainted with terms that describe positions, directions, and planes of the body.* ● *I can identify the meanings for new word elements and use them to understand medical terms.*	<table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table>	**Lesson Progression and Standards Connection:** ● *Use medical terminology in order to interpret, transcribe and communicate information, data and observations.* ● *Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.* ● *Describe the basic structures and functions of cells, tissues, organs and systems as they relate to homeostasis.*	**Mandatory Lessons/Activities** ● *Students can demonstrate a common exercise(such as jumping jacks) and identify the plane of the body involved* ● *Students can determine the directional term associated with a body part*

Pacing:	1 block		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *End of Unit Assessment* ● *UConn Assessment (2021-22*

UNIT 2: Suffixes and Prefixes			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HL DIA 1.0 Communicate information with a healthcare environment and convey key diagnostic information to healthcare workers and patients in an accurate and timely manner.	HL DIA 1.2 Employ effective written communication techniques when communicating diagnostic information with departments and professionals. ● *Identify correct syntax and grammar appropriate to patient/client.* ● *Report relevant information in a timely manner.* ● *Distinguish between subjective and objective information when reporting.* ● *Analyze communication for appropriate response and provide feedback.* ● *Organize, write and compile technical information and summaries.* ● *Use medical terminology in order to interpret, transcribe and communicate information, data and observations*	● Word analysis ● Suffix ● Prefix ● Combining forms ● Pronunciation	Root, combining vowel, prefix, suffix, combining form, noun suffix, adjective suffix, indication, procedure,
HLC02 Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.			
HL 1.0 Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career.	HL 1.1: Utilize knowledge of human structure and function to conduct health care roles. ● *Describe the basic structures and functions of cells, tissues, organs and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants*	● Blood Cells	Erythrocytes, leukocytes, hemoglobin, granulocytes, eosinophils, basophils, neutrophils, phagocytes, polymorphonuclear leukocytes, mononuclear cells, lymphocytes, monocytes,thrombocytes, platelets, acromegaly, laparoscopy, tracheotomy, adenoids

	and cavities. ● *Analyze the interdependence of the body systems as they relate to wellness, disease, disorders, therapies and care rehabilitation.*		
HL 1.0 Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career.	HL 1.2: Utilize knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classification(s), causes, diagnoses, therapies and care/rehabilitation to include biotechnological applications.* ● *Analyze methods to control the spread of pathogenic microorganisms.* ● *Contrast various types of immunities.* ● *Analyze body system changes in light of diseases, disorders and wellness.* ● *Compare the aging process among the body systems.*	●Rh conditions	●Antigen, antibodies, immune response, vaccine,Rh condition, congenital abnormality, recumbent DNA, syndromes

UNIT 2: Suffixes and Prefixes

This unit builds upon the learned content from unit 1. Students delve deeper into the most common medical suffixes and prefixes. Two learning sequences within this unit ask students to apply their understanding of either prefixes or suffixes to the human body and its conditions: (1) understanding the various Blood Cells, (2) understanding Rh conditions.

Essential Questions:

- *What information can you elicit from a medical term?*
- *What are the components of a medical term?*
- *How can the components of a medical term be used to define the medical condition or location on the human body.*

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments
Hyperlink standard code Advance CTE.	● *I can define new suffixes and review those presented in unit 1.* ● *I can practice word analysis by using suffixes with combining forms to build terms.* ● *I can practice word analysis by using suffixes with combining forms to understand terms.*		**Lesson Progression and Standards Connection:** ● *Use medical terminology in order to interpret, transcribe and communicate information, data and observations.* ● *Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.*	**Mandatory Lessons/Activities:** ● *Students use the suffix "itis" to prepare an informational slide about an "Itis" of their choosing. Ie; tonsillitis.* ● *Students will describe a medical case using appropriate medical terms in chapter 3*
Pacing:	1 bocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Students will create a presentation using the suffix "cele" to describe a medical condition of their choosing. Students will incorporate knowledge of body cavities, body systems and directional terms*
Hyperlink standard code Advance CTE.	● *I can identify functions of the different types of blood cells in the body.* ● *I can apply my knowledge of suffixes to understand the functions and different types of*		**Lesson Progression and Standards Connection:** ● *Use medical terminology in order to interpret, transcribe and communicate information, data and observations.* ● *Use oral and written communications skills in creating, expressing, and interpreting*	**Mandatory Lessons/Activities** ● *Students will create a short presentation describing the functions of 5 main blood cells* ● *Students will use a microscope to identify main blood cells*

	Selected Response
x	Constructed Response
x	Performance
	Observation

	Selected Response
x	Constructed Response

	blood cells in the body.	x Performance Observation	*information and ideas including technical terminology and information.* ● *Describe the basic structures and functions of cells, tissues, organs and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.*	*based on morphology*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Students will create a children's book illustrating the role of the blood cells in the human body*
Hyperlink standard code Advance CTE.	● *I can define basic prefixes used in medical language.* ● *I can analyze medical terms that combine prefixes and other word elements.*	Selected Response x Constructed Response x Performance Observation	**Lesson Progression and Standards Connection:** ● *Use medical terminology in order to interpret, transcribe and communicate information, data and observations.* ● *Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.*	**Mandatory Lessons/Activities:** ● *Students will choose a body tissue and prepare a presentation on a condition pertaining to that tissue*
Pacing:	1 block		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *UConn Practice Assessment (2021-22)*
Hyperlink standard code Advance	● *I can apply my knowledge of prefixes to understand the Rh condition as an example of antigen-antibody reaction.*	Selected Response	**Lesson Progression and Standards Connection:** ● *Use medical terminology in order to interpret, transcribe and communicate information, data and observations.*	**Mandatory Lessons/Activities:** ● *Students will create a graphic representation of "Rh" incompatibility including first*

<table>
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<td>CTE.</td>
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<table>
<tr><td>x</td><td>Constructed Response</td></tr>
<tr><td>x</td><td>Performance</td></tr>
<tr><td></td><td>Observation</td></tr>
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<td>

Use oral and written communications skills in creating, expressing, and interpreting information and ideas including technical terminology and information.
Compare selected diseases/disorders including respective classification(s), causes, diagnoses, therapies and care/rehabilitation to include biotechnological applications.
Analyze body system changes in light of diseases, disorders and wellness.

</td>
<td>and second pregnancy</td>
</tr>
<tr>
<td>Pacing:</td>
<td>1 block</td>
<td></td>
<td>
CCSS Connections:

CCSS.ELA-LITERACY.RST.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.
CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.

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<td>
Assessments:

End of Unit Assessment
UConn Assessment (2021-22)

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</tr>
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UNIT 3: Digestive System			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.1 Use knowledge of human structure and function to conduct healthcare roles. ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	Learn the structure and function of the digestive system	Absorption, amino acids, amylase, anus, appendix,bile, bilirubin, bowel, canine teeth, common bile duct, defecation, deglutition, dentin, digestion, duodenum, elimination, emulsification, enamel, enzyme, esophagus, fatty acids, feces, gallbladder, glucose, glycogen, hydrochloric acid, ileum, incisor, insulin, jejunum, lipase, liver, lower esophageal sphincter, mastication, molar teeth, palate, pancreas, papillae, parotid gland Peristalsis, pharynx, portal vein, protease, pulp, pyloric sphincter, pylorus, rectum, rugae, saliva, salivary gland, sigmoid colon, sphincter, stomach
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.2 Use knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Compare the aging process among body systems.*	Understand the medical terms utilized to describe diseases and disorders of the digestive system.	Achalasia, anal fistula, anorexia, apthous stomatitis, ascites, borborygmi, cholelithiasis, cirrosis, colonic polyps, colorectal cancer, constipation, chron disease, dental caries, diarrhea, diverticula, diverticulitis, diverticulosis, dysentary, dysphagia, eructation, esophageal cancer, esophageal varices, etiology, flatus, gastric cancer, gastroesphageal reflux disease, hematochezia, hemorriods, heptocellualr carcinoma, herpetic stomatitis, hiatal hernia, icterus, idiopathic, ileus, inflammatory bowel disease, inguinal hernia, intussusception, irritable bowel syndrome, jaundice, lipoma, melena, nausea, oral leukoplakia, pancreatic caner, pancreatitis, peptic ulcer, periodontal disease, pyorrhea, ulcerative colitis, viral hepatitis, volvulus
HLC02 Use oral and written communication skills in creating, expressing and interpreting information and ideas including	n/a	Deepen academic understanding of medical terminology by applying and using	-ectasis, -ectasia, -pepsia, -phagia, -plasy, -ptysis, -rrhage. -rrhaphy, -rrhea, -spasm, -stasis, -stenosis, -tresia

technical terminology and information.		common suffixes related to the digestive system	

UNIT 3: ESSENTIAL QUESTIONS

In this unit, students build their conceptual understanding of the anatomy, physiology, pathology and basic terminology of the human digestive system Students are also exposed to and learn common digestive system related laboratory tests, clinical procedures, and abbreviations.

- What are the components of the digestive system?
- How do the components of the digestive system work together to digest food?
- What diseases are common to the human digestive system?
- What are the common clinical tests and procedures designed to support the digestive system?

<table>
<tr><th>CTE Standard</th><th>Learning Targets: I can</th><th>Summative Assessment Strategy</th><th>Lesson Progression and Connection to ELA/Math CCSS</th><th>Common Learning Experiences and Assessments</th></tr>
<tr><td>HL 1.1</td><td>● I can name the organs of the digestive system.
● I can describe the locations and functions of the organs in the digestive system.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.
● Compare relationships among cells, tissues, organs and systems.
● Explain body planes, directional terms, quadrants and cavities</td><td>Mandatory Lessons/Activities:
● Complete digestive system coloring sheet
● Students will use knowledge of digestive system structure and function to describe a disease state affecting the system</td></tr>
<tr><td>Pacing:</td><td>1 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● Incredible journey of a piece of chicken-students will trace a piece of chicken through the digestive system, illustrating all the organs, cells and enzymes involved in digestion</td></tr>
<tr><td>HL 1.1
HL1.2
HLC02</td><td>● I can define the combining forms for organs and know the meaning of related medical terminology.
● I can model the pathway of food through the gastrointestinal tract.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.
● Explain body planes, directional terms, quadrants and cavities</td><td>Mandatory Lessons/Activities:
● Digestive System simulation lab</td></tr>
<tr><td>Pacing:</td><td>1 blocks</td><td>CCSS Connections:</td><td>Assessments:</td></tr>
</table>

			● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	● *UConn Practice Assessment (2021-22)*
HL 1.2	● *I can describe the signs, symptoms, and disease conditions affecting the digestive system.* ● *I can analyze terms that describe the signs and symptoms of pathologic conditions of the gastrointestinal tra*ct.	<table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td></td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table>	**Lesson Progression and Standards Connection:** ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.*	**Mandatory Lessons/Activities:** ● *Virtual appendectomy via laparoscopy*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Students will use medical terminology to present a medical case to the class*
HL C02	● *I can define and apply new suffixes and use them to form terms related to the digestive system.* ● *I can apply new knowledge to understand medical terms in their proper context, such as in medical reports and records and in vignettes.*	<table><tr><td></td><td>Selected Response</td></tr><tr><td></td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table>	**Lesson Progression and Standards Connection:** ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.*	**Mandatory Lessons/Activities:** ● *Grey's Anatomy clip of ascites-students will discuss the causes of jaundice as it relates to the liver* ● *Virtual Colonoscopy* ● *Virtual Endoscopy*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.11-12.4-Determine the	**Assessments:** ● *End of Unit Assessment*

			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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	● *UConn Assessment (2021-22)*

UNIT 4: Urinary System			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.1 Use knowledge of human structure and function to conduct healthcare roles. ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	Learn the structure and function of the urinary system	Arteriole, calciferol, calyx, catheter, cortex, creatinine, electrolyte, erythropoietin, filtration, glomerular capsule, glomerulus, hilum, kidney, meatus, medulla, nephron, nitrogenous waste, potassium, reabsorption, renal artery, renal pelvis, renal tubule, renal vein, renin, sodium, trigone, urea, ureter, urethra, uric acid, urinary bladder, urination, voiding
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.2 Use knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Compare the aging process among body systems.*	Understand the medical terms utilized to describe diseases and disorders of the urinary system.	Glomerulonephritis, interstitial nephritis, nephrolithiasis, nephrotic syndrome, nephrosis, polycystic kidney disease, pyelonephritis, renal cell carcinoma, renal failure, renal hypertension, Wilms tumor, bladder cancer, diabetes insipidus, diabetes mellitus, blood urea nitrogen, creatinine clearance, CT urography, renal angiography, retrograde pyelogram, voiding cystourethrogram, ultrasonography, radioisotope scan, MRI urography, cystoscopy, dialysis, lithotripsy, renal angioplasty, renal biopsy, renal transplantation, urinary catheterization
HLC02 Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.	n/a	Deepen academic understanding of medical terminology by applying and using common suffixes related to the urinary system	nephr/o, pyel/o, trigon/o, ureter/o, vesic/o, albumin/o, azot/o, bacteri/o, dips/o, kal/i, ket/o, lith/o, natr/o, noct/o, olig/o, -poietin, -tripsy, ur/0, urin/o, -uria Abbreviations: (p237-The Language of Medicine)

UNIT 4: Urinary System

This unit helps students to use their knowledge of medical terms to gain an understanding of the ways in which the body removes nitrogenous waste from the blood via the urinary system.

- What are the components of the urinary system?
- How do the components of the urinary system work together to remove waste from the body?
- What diseases are common to the human urinary system?
- What are the common clinical tests and procedures related to the urinary system?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments
HL 1.1	● *I can name the essential organs of the urinary system.* ● *I can describe the locations and functions of the essential organs in the* urinary system.		**Lesson Progression and Standards Connection:** ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities*	**Mandatory Lessons/Activities:** ● *Complete Urinary System Diagram* ● *Describe body cavities that house urinary organs* ● *Describe body planes involved in urinary system*
Pacing:	1 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Students can describe how urine is created including cells, tissues and organs involved* ● *Students can describe contents of normal urine*
HL 1.1 HL 1.2 HL C02	● *I can define urinary systems related to combining forms, prefixes and suffixes.* ● *I can model the path of urine from the renal arterioles to the point at which* urine leaves the body.		**Lesson Progression and Standards Connection:** ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.* ● *Explain body planes, directional terms, quadrants and cavities*	**Mandatory Lessons/Activities:** ● *Complete chapter review page 244-check answers page 248*
Pacing:			**CCSS Connections:**	**Assessments:**

	Selected Response
x	Constructed Response
x	Performance
	Observation

<table>
<tr><td></td><td></td><td></td><td>● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>● UConn Practice Quiz (2021-22)</td></tr>
<tr><td>HL 1.2</td><td>● I can identify common pathologic conditions affecting the urinary system.
● I can list and explain laboratory tests, clinical procedures and abbreviations that pertain to the urinary system.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.
● Analyze method to control spread of pathogenic microorganisms.
● Contrast various types of immunities,
● Analyze body systems changes in light of diseases, disorders and wellness.</td><td>Mandatory Lessons/Activities:
● Mock Urinalysis Lab</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
●</td><td>Assessments:
● Students can describe renal dialysis using appropriate medical terms</td></tr>
<tr><td>HL C02</td><td>● I can apply new knowledge to understand medical terms in their proper context, such as in medical reports and records and in vignettes.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</td><td>Mandatory Lessons/Activities:
● Case Study-Kidney Transplant
● Virtual lithotripsy</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● End of Unit Assessment
● UConn Assessment (2021-22)</td></tr>
</table>

UNIT 5: Female and Male Reproductive Systems			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.1 Use knowledge of human structure and function to conduct healthcare roles. ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	Learn the structure and function of the male and female reproductive systems	**Female Reproductive System:** adnexa uteri, amnion, areola, bartholin glands, cervix, chorion, clitoris, coitus, corpus luteum, cul-de-sac, embryo, endometrium, estrogen, fallopian tube, fertilization, fetus, fimbriae, follicle stimulating hormone, gamete, genitalia, gestation, gonad, gynecology, human chorionic gonadotropin, hymen, labia, lactiferous ducts, luteinizing hormone, mammary papilla, menarche, menopause, menstruation, myometrium, neonatology, obstetrics, orifice, ovarian follicle, ovary, ovulation, ovum, parturition, perineum, pituitary gland, placenta, pregnancy, progesterone, puberty, uterine serosa, uterus, vagina, vulva, zygote **Male Reproductive System**: bulbourethral gland, ejaculation, ejactulatory duct, epididymis, erectile dysfunction, flagellum, fraternal twins, glans penis, identical twins, interstitial cells of the testes, parenchymal tissue, penis, perineum, prepuce, prostate gland, scrotum, semen, seminal vesicles, seminiferous tubules, spermatozoon, sterilization, stromal tissue, testis, testosterone, vas deferens
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.2 Use knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,*	Understand the medical terms utilized to describe diseases and disorders of the male and female reproductive systems.	Carcinoma of the cervix, cervitis, carcinoma of the endometrium, endometriosis, fibroids, ovarian carcinoma, ovarian cysts, pelvic inflammatory disease, carcinoma of the breasts, fibrocystic breast disease, abrupto placentae, ectopic pregnancy, multiple gestations, placenta previa, preeclampsia, down syndrome, erthroblasttosis details, hyaline membrane disease, hydrocephalus, meconium aspiration

	● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Compare the aging process among body systems.*		syndrome, pyloric stenosis, pap test, hysterosalingography, mammography, pelvic ultrasonography, aspiration, cauterization, colposcopy, conization, cryosurgery, culdocentis, dilation and curettage, exenteration, laparoscopy, tubal ligation, abortion, amniocentisis, cesarean section, chorionic villus sampling, fetal monitoring, in vitro fertization, carcinoma of the testes, cryptorchidism, hydrocele, testicular torsion, variocele, benign prostatic hyperplasia, carcinoma of the prostate, hypospadias, phimosis, castrations, circumcision, digital rectal examination, photoselective vaporization of the prostate, transurethral resection of the prostate,vasectomy
HLC02 Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.	n/a	Deepen academic understanding of medical terminology by applying and using common suffixes related to the male and female reproductive systems.	amni/o, bartholin/o, cervic/o, chori/o, colp/o, culd/o, episi/o, galact/o, gynec/o, hyster/o, lact/o, mamm/o, mast/o, men/o, metr/o, my/o, nat/i, obstetr/o, o/o, oophor/o, ov/o, ovari/o, ovul/o, perine/o, salping/o, uter/o, vagin/o, vulv/o, -arche, -cyesis, -gravida, -paris, -rrhea, -salpinx, -tocia, -version, dys-, endo-, in-, intra-, multi-, nulli-, pre-, primi-, retro-, andr/o, balan/o, cry/o, crypt/o, epididym/o, gon/o, hydr/o, orch/o, pen/o, prostat/o, semin/i, sperm/o, terat/o, test/o, varic/o, vas/o, zo/o -genesis, -one, -pexy, -stomy

UNIT 5: Female and Male Reproductive Systems

The male and female reproductive systems are designed to allow for the union of the ovum and sperm. Each sex' reproductive system has unique characterisitcs, organs, and related disorders. This unit helps students build their medical vocabulary while investigating and making sense of the male and female reproductive systems.

- How do the female organs and hormones support normal processes of ovulation, menstruation and pregnancy?
- How do abnormal conditions impact female/male reproduction?
- What laboratory tests and clinical procedures are common to the female/male reproductive system?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments
HL 1.1	● *I can name and locate the female reproductive organs and learn their combining forms.* ● *I can explain how the female reproductive organs and their hormones function in the normal processes of ovulation, menstruation, and pregnancy.*		**Lesson Progression and Standards Connection:** ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities.*	**Mandatory Lessons/Activities:** ● *Complete female reproductive diagram* ● *Complete female menstruation chart* ● *Fetal maturation chart* ● *Sterilization procedure*
Pacing:	3 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Students will complete a project comparing the development of the fetus to fruit. Students will use medical terms to describe growth and development of the fetus*
HL 1.2	● *I can identify abnormal conditions of the female reproductive system and of the newborn.* ● *I can describe important laboratory tests and clinical procedures used in gynecology and obstetrics, and recognize related abbreviations.*		**Lesson Progression and Standards Connection:** ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.*	**Mandatory Lessons/Activities:** ● *Students will prepare a presentation on a disorder of the female reproductive system.* ● *Students will work in groups to complete female reproductive puzzle* ● *Students can translate a case into appropriate medical*

	Selected Response
x	Constructed Response
x	Performance
	Observation

<table>
<tr><td></td><td></td><td rowspan="2"></td><td></td><td>terms for past pregnancies</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
CCSS.ELA-LITERACY.RST.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.
CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
Page 289, explain a post-op report and interpret medical sentences</td></tr>
<tr><td>HL 1.1</td><td>I can name, locate and describe the functions of the organs of the male reproductive system.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.
Compare relationships among cells, tissues, organs and systems.
Explain body planes, directional terms, quadrants and cavities.</td><td>Mandatory Lessons/Activities:
Complete male reproductive system diagram
Explain male sterilization procedure</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
CCSS.ELA-LITERACY.RST.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.
CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
UConn Practice Assessment (2021-22)</td></tr>
<tr><td>Hl 1.2</td><td>I can define abnormal conditions and infectious diseases that affect the male reproductive system.
I can differentiate among several types of sexually transmitted infections,
I can describe various laboratory tests and clinical procedures pertinent to disorders of the male reproductive system, and</td><td><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.
Analyze method to control spread of pathogenic microorganisms.
Contrast various types of immunities,
Analyze body systems changes in light of diseases, disorders and wellness.</td><td>Mandatory Lessons/Activities
Epidemiology project-students will investigate STD’s common to the community
Students will view prepared spermatozoa slides under microscope to determine normal/abnormal morphology</td></tr>
</table>

<table>
<tr><td></td><td>recognize related abbreviations.</td><td rowspan="2"></td><td></td><td></td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
CCSS.ELA-LITERACY.RST.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.
CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
Students will choose a disease of the male reproductive system and prepare a presentation including relevant organs, symptoms,diagnostic procedures, treatment and diagnosis</td></tr>
<tr><td>HCL02</td><td>I can apply new knowledge to understand medical terms in their proper contexts, such as medical reports and records.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</td><td>Mandatory Lessons/Activities:
Testicular Cancer case study</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
CCSS.ELA-LITERACY.RST.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.
CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
End of Unit Assessment
UConn Assessment (2021-22)</td></tr>
</table>

UNIT 6: Nervous System			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.1 Use knowledge of human structure and function to conduct healthcare roles. ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	Learn the structure and function of the nervous system	Acetylcholine. Afferent nerve, arachnoid membrane, astrocyte, autonomic nervous system, axon, blood-brain barrier, brainstem, cauda equina, cell body, central nervous system, cerebellum, cerebral cortex, cerebrospinal fluid, cerebrum, cranial nerves, dendrite, dura mater, efferent nerve, ependymal cell, ganglion, glial cell, gyrus, hypothalamus, medulla oblongata, meninges, microglial cell, midbrain, motor nerve, myelin sheath, nerve, neuron, neurotransmitter, oligodendroglial cell, parasympathetic nerves, parenchyma, peripheral nervous system, pia mater, plexus, receptor, sciatic nerve, sensory nerve, spinal nerves, stimulus, stroma, sulcus, sympathetic nerves, thalamus, vagus nerve, ventricles of the brain.
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.2 Use knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Compare the aging process among body systems.*	Understand the medical terms utilized to describe diseases and disorders of the nervous system.	Congenital, hydrocephalus, spina bifida, alzheimer disease, amyotrophic lateral sclerosis, epilepsy, huntington disease, multiple sclerosis, myasthenia gravis, palsy, parkinson disease, tourette syndrome,herpes zoster, meningitis, human immunodeficiency virus encephalopathy, brain tumor, cerebral concussion, cerebral contusion, cerebrovascular accident
HLC02 Use oral and written communication skills in creating,	n/a	Deepen academic understanding of medical	cerebell/o, cerebr/o, dur/o, encephal/o, gli/o, lept/o, mening/o, my/o, myel/o, neur/o, pont/o,

expressing and interpreting information and ideas including technical terminology and information.		terminology by applying and using common suffixes related to the nervous system.	radicul/o, thalam/o, thec/o, vag/o, alges/o,-algesia, -algia, caus/o, comat/o, esthesi/o, ethesi/o, kines/o, -lepsy, lex/o, -paresis, -phasia, -plegia,-praxia, -sthenia, syncop/o. tax/o

UNIT 6: Nervous System

The nervous system is one of the most complex of the human body systems. More than 100 billion nerve cells operate constantly all over the body to coordinate the activities we do consciously and voluntarily as well as those that occur unconsciously or involuntarily. In this unt students develop a sense of the nervous system and build their medical terminology to include suffixes, prefixes and combining forms related to the human nervous system.

Essential Questions

- How do the major organs of the nervous system function together>
- What are the suffixes, prefixes and combining forms used to describe medical terms related to the nervous system?
- What pathologies or conditions can impact the healthy functioning of the nervous system?

<table>
<tr><th>CTE Standard</th><th>Learning Targets: I can</th><th>Summative Assessment Strategy</th><th>Lesson Progression and Connection to ELA/Math CCSS</th><th>Common Learning Experiences and Assessments</th></tr>
<tr><td>HL 1.1</td><td>● I can name, locate and describe the major organs of the nervous system and their functions.
● I can learn the nervous system combining forms and use them with suffixes and prefixes.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.
● Compare relationships among cells, tissues, organs and systems.
● Explain body planes, directional terms, quadrants and cavities
● Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.</td><td>Mandatory Lessons/Activities
● Student will label nervous system diagram
● Students will create a graphis poster representing the cranial nerves
● Students will describe the body cavities that house the organs of the nervous system
● Students will use clay to create a model of the brain
● Virtual Brain Healing after stroke</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● Students will trace a nerve impulse from start to finish including neurotransmitters</td></tr>
<tr><td>HL 1.2</td><td>● I can define pathologic conditions affecting the nervous system.
● I can describe nervous system</td><td><table><tr><td></td><td>Selected Response</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classifications, causes, diagnosis,</td><td>Mandatory Lessons/Activities:
● CTE/Alzheimers-Students compare and contrast CTE and</td></tr>
</table>

	related laboratory tests, clinical procedure, and abbreviations.	x Constructed Response x Performance Observation	*therapies, and care rehabilitation to include biotechnological applications.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.*	*alzheimer's progression*
Pacing:	1 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Students will choose a neuromuscular disorder and create an infographic detailing a nervous system disorder.*
HLC02	● *I can apply new knowledge to understanding medical terms in their proper context, such as medical reports and records.*	Selected Response Constructed Response x Performance Observation	**Lesson Progression and Standards Connection:** ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.*	**Mandatory Lessons/Activities:** ● *Student will complete Stroop Test with Partner* ● *Students will complete cranial nerves assessment with partner*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Assessment not provided by UConn, quiz developed by staff*

UNIT 7: Cardiovascular System

UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.1 Use knowledge of human structure and function to conduct healthcare roles. ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	Learn the structure and function of the cardiovascular system	Aorta, apex of the heart, arteriole, artery, atrioventricular bundle, atrioventricular node, atrium capillary, carbon dioxide, coronary arteries, deoxygenated blood, diastole, electrocardiogram, endocardium, endothelium, mitral valve, murmur, myocardium, normal sinus rhythm, oxygen, pacemaker, pericardium, pulmonary artery, pulmonary circulation, pulmonary valve, pulmonary vein, pulse, septum, sinoatrial node, sphygmomanometer, systole, tricuspid valve, valve, vena cava, ventricle, venule
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.2 Use knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Compare the aging process among body systems.*	Understand the medical terms utilized to describe diseases and disorders of the cardiovascular system.	Atrioventricular block, flutter, fibrillation, coarctation of the aorta, patent ductus arteriosus, septal defects, tetralogy of the fallot, congestive heart failure, coronary artery disease, endocarditis, hypertensive heart disease, mitral valve prolapse, murmur, pericarditis, rheumatic heart disease, aneurysm, deep vein thrombosis, hypertension, peripheral arterial disease, raynaud's disease, varicose veins, RNP test, cardiac biomarkers, lipid profile, lipoprotein electrophoresis, angiography, computed tomography angiography, digital subtraction angiography, electron beam computed tomography, doppler ultrasound studies, echocardiography, positron emission tomography, technetium Tc 99m sestamibi scan, thallium 201 scan,cardiac MRI, cardiac catheterization, electrocardiography

HLC02 Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.	n/a	Deepen academic understanding of medical terminology by applying and using common suffixes related to the cardiovascular system.	angi/o, aort/o, arter/o, arteri/o, ather/o, atri/o, brachi/o, cardi/o, cholesterol/o, coron/o, cyan/o, myx/o, ox/o, pericardi/o, phleb/o, rrhythm/o, sphygm/o, steth/o, thromb/o, valvul/o, valv/o, vas/o, vascul/o, ven/o, ven/i, ventricul/o

UNIT 7: ESSENTIAL QUESTIONS

Body cells are dependent on a constant supply of nutrients and oxygen. The cardiovascular system, consisting of the heart and blood vessels, move nutrients and oxygen to each of the body's cells to allow for proper functioning.
Essential Questions:
How does the body ensure that oxygen and food will be delivered to all of its cells?
What are the parts of the heart and associated blood vessels responsible for the circulation of blood?
What pathologies or conditions can impact the cardiovascular system?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments
Hyperlink standard code Advance CTE.	● *I can name the parts of the heart and associated blood vessels.* ● *I can describe the functions of the heart and associated blood vessels in the process of circulation.*		**Lesson Progression and Standards Connection:** ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities*	**Mandatory Lessons/Activities:** ● *Students will label cardiovascular diagram* ● *Students can describe relevant cells and tissues relating to cardiovascular system* ● *Students can describe the pathway of blood through the body*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *"Incredible Journey" Students will tell the story of 120 days of being a red blood cell*
Hyperlink standard code Advance CTE.	● *I can model the travel of blood through the heart.* ● *I can define combining forms that relate to the cardiovascular system.*		**Lesson Progression and Standards Connection:** ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities*	**Mandatory Lessons/Activities:** ● *Students will be able to correctly trace path of blood through the chambers of the heart* ● *Students will be able to identify oxygenated and deoxygenated blood in the*

	Selected Response
x	Constructed Response
x	Performance
	Observation

<table>
<tr><td></td><td></td><td rowspan="3"></td><td></td><td>heart</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● UConn Practice Assessment (2021-22)</td></tr>
<tr><td>Hyperlink standard code Advance CTE.</td><td>● I can identify and describe the major pathologic conditions affecting the heart and blood vessels.
● I can describe laboratory tests and clinical procedures pertaining to the cardiovascular system and recognize relevant abbreviations.</td><td><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.
● Analyze method to control spread of pathogenic microorganisms.
● Contrast various types of immunities,
● Analyze body systems changes in light of diseases, disorders and wellness.</td><td>Mandatory Lessons/Activities:
● Students will be able to demonstrate how to take a pulse
● Students will complete a virtual blood pressure lab
● Students will demonstrate proper technique in taking a blood pressure.</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● Students will correctly determine blood pressure on simulator</td></tr>
<tr><td>Hyperlink standard code Advance CTE.</td><td>● I can apply new knowledge to understand medical terms in their proper context, such as in medical reports and records.</td><td><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</td><td>Mandatory Lessons/Activities:
● Students compare and contrast heart arrhythmias including reading an EKG</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:</td><td>Assessments:</td></tr>
</table>

		☐ Observation	● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	● *End of Unit Assessment* ● *UConn Assessment (2021-22)*

UNIT 8: Respiratory System			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.1 Use knowledge of human structure and function to conduct healthcare roles. ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	Learn the structure and function of the respiratory system	Adenoids, alveolus, apex of the lung, base of the lung, bronchioles, carbon dioxide, cilia, diaphragm, epiglottis, expiration, glottis, hilum of the lung, inspiration, larynx, lobe, mediastinum, nares, oxygen, palatine tonsil, paranasal sinus, parietal pleura, pharynx, pleura, pleural cavity, pulmonary parenchyma, respiration, trachea, visceral pleura
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.2 Use knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Compare the aging process among body systems.*	Understand the medical terms utilized to describe diseases and disorders of the respiratory system.	Auscultation, percussion, pleural rub, rales, rhonchi, sputum, stridor, wheezes, croup, diphtheria, epistaxis, pertussis, asthma, bronchiectasis, chronic bronchitis, cystic fibrosis, atelectasis, emphysema, lung cancer, pneumoconiosis, pneumonia, pulmonary abscess, pulmonary edema, pulmonary embolism, pulmonary fibrosis, sarcoidosis, tuberculosis, mesothelioma, pleural effusion, pleurisy, pneumothorax,chest x-ray, computer tomography scan of the chest, magnetic reasoning imaging of the chest, positron emission tomography scan of the lung, ventilation-perfusion scan, bronchoscopy,endotracheal intubation, laryngoscopy,
HLC02 Use oral and written communication skills in creating, expressing and interpreting information and ideas including	n/a	Deepen academic understanding of medical terminology by applying and using common suffixes	adenoid/o, alveol/o, bronch/o, bronchiol/o, capn/o, coni/o, cyan/o, epiglott/o, laryng/o, lob/o, mediastin/o, nas/o, ox/o, orth/o, pector/o, pharyng/o, phon/o, phren/o,

technical terminology and information.		related to the respiratory system.	pleur/o, pneum/o, pulmon/o, rhin/o, sinus/o, spir/o, tel/o, thorac/o, tonsill/o, trache/o, -ema, -osmia, -pnea, -ptysis, -sphyxia, -thorax

UNIT 8: ESSENTIAL QUESTIONS

Respiration is the mechanical process of breathing, the exchange of air between the lungs and the external environment. Respiration occurs on two levels-external and internal. External respiration is the exchange of inhaled air with the lungs and internal respiration involves the exchange of gases at the level of cells.

Essential Questions:

- *What are the parts and functions of the respiratory system?*
- *How do the organs of the respiratory system interact to supply oxygen to the capillaries?*
- *What is the connection between the cardiovascular system and the respiratory system?*
- *What pathologies or conditions can impact the respiratory system?*

<table>
<tr><th>CTE Standard</th><th>Learning Targets: I can</th><th>Summative Assessment Strategy</th><th>Lesson Progression and Connection to ELA/Math CCSS</th><th>Common Learning Experiences and Assessments</th></tr>
<tr><td>HL 1.1</td><td>● I can name the organs in the respiratory system.
● I can define the location and function of each of the organs in the respiratory system.</td><td rowspan="2"><table><tr><td>x</td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.
● Compare relationships among cells, tissues, organs and systems.
● Explain body planes, directional terms, quadrants and cavities</td><td>Mandatory Lessons/Activities:
● Students will label respiratory diagram
● Students can explain the specialized cells and tissues associated with the respiratory system
● “Tom’s endoscopy”</td></tr>
<tr><td>Pacing:</td><td>1 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
Respiratory System Practical</td></tr>
<tr><td>HL 1.1
HL 1.2</td><td>● I can model the flow of air through the organs of the respiratory system.
● I can identify pathologic conditions that affect the respiratory system and interrupt the flow of oxygen.</td><td><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.
● Compare relationships among cells, tissues, organs and systems.</td><td>Mandatory Lessons/Activities:
● Students will identify abnormal respiratory sounds and the diseases they are associated with</td></tr>
</table>

		x Performance Observation	● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	● *Respirations lab*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** UConn Practice Quiz
HL 1.2 *HLC02*	● *I can describe clinical procedures related to the respiratory system, and recognize relevant abbreviation.* ● *I can apply new knowledge to understand medical terms in their proper context, such as in medical reports and records.*	Selected Response x Constructed Response x Performance Observation	**Lesson Progression and Standards Connection:** ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.*	**Mandatory Lessons/Activities:** ● *Students will demonstrate assessing respirations.* ● *Students will demonstrate auscultation technique*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *End of Unit Assessment* ● *UConn Assessment (2021-22)*

UNIT 9: Blood and Lymphatic Systems			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.1 Use knowledge of human structure and function to conduct healthcare roles. ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	Learn the structure and function of the blood and lymphatic systems	**Blood:**Albumin, antibody, antige, basophil, bilirubin, coagulation, colony-stimulating factor, differentiation, electrophoresis, eosinophils, erythroblast, erythrocyte, erythropoietin, fibrin, fibrinogen, globulin, granulocyte, hematopoietic stem cell, hemoglobin, heparin,immune reaction, immunoglobulin leukocyte, lymphocyte, macrophage, megakaryocyte, monocyte, mononuclear, myeloblast, neutrophil, plasma, plasmapheresis, platelet, polymorphonuclear, prothrombin, reticulocyte, Rh factor, serum, stem cell, thrombin, thrombocyte **Lymphatic:** axillary nodes, B cell, cell-mediated immunity, cervical nodes, complement system, cytokines, cytotoxic T cell, dendritic cell, helper T cell, humoral immunity, immunity, immunoglobulins, immunotherapy, inguinal nodes, interferons, interleukins, interstitial fluid, lymph, lymph capillaries, lymphoid organs, lymph nodes, lymph vessel, macrophage, mediastinal nodes, mesenteric nodes, monoclonal antibody, natural immunity, paraaortic nodes, plasma cell, right lymphatic duct, spleen, suppressor T cell, T cell, tolerance, thoracic duct, thymus gland, tonsils, toxin, vaccination, vaccine.
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.2 Use knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.*	Understand the medical terms utilized to describe diseases and disorders of the blood and lymphatic systems.	**Blood:** anemia, aplastic anemia,hemolytic anemia, pernicious anemia, sickle cell anemia, thalassemia, hemochromatosis, polycythemia vera, hemophilia, purpura, leukemia, granulocytosis, mononucleosis, multiple myeloma, antiglobulin test; bleeding time, coagulation time, complete blood count;erythrocyte sedimentation rate, hematocrit, hemoglobin test, platelet count, prothrombin time, red blood cell count, red blood cell morphology, white blood cell count, whiteblood cell differential,apheresis, blood transfusion, bone marrow biopsy, hematopoietic stem cells transplantation **Lymphatic:** immunodeficiency, acquired immunodeficiency

	● *Compare the aging process among body systems.*		syndrome, hypersensitivity, allergy, lymphoma, multiple myeloma, thymoma, immunoelectrophoresis, viral load test, computed tomography scan,
HLC02 Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.	n/a	Deepen academic understanding of medical terminology by applying and using common suffixes related to the blood and lymphatic systems.	**Blood:** bas/o, chrom/o, coagul/o, cyt/o, eosin/o, erthyr/o, granul/o, hem/o, hemat/o, hemoglobin/o, is/o, kary/o, leuk/o, mon/o, morph/o, myel/o, neutr/o, nucle/o, phag/o, poikil/o, sider/o, spher/o, thromb/o, -apheresis, -blast, -cytosis, -emia,-gen, -globin, -globilin, -lytic, -oid, -osis, --penia, -phage, -philia, -phoresis, -poiesis, -stasis **Lymphatic:** immun/o, lymph/o, lymphaden/o, splen/o, thym/o, tox/o, ana-, inter-

UNIT 9: ESSENTIAL QUESTIONS

The primary function of blood is to maintain a constant environment for the other living tissues of the body. Blood transports nutrients, gases, and waster to and from the cells of the body. Lymph differs from blood, but it has a close relationship with the blood system, hence the combined unit of study.

- What are the parts and functions of blood and the blood system?
- What pathologies or conditions can impact the blood system?
- What are the parts and functions of the lymphatic and immune systems?
- How are the blood, lymphatic, and immune systems connected?
- What pathologies or conditions can impact the lymphatic and immune systems?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments
HL 1.1	● *I can identify the terms relating to the composition, formation and function of blood.* ● *I can differentiate between the 4 major blood types.*	x Selected Response x Constructed Response Performance Observation	**Lesson Progression and Standards Connection:** ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	**Mandatory Lessons/Activities:** ● *Complete Blood Components diagram* ● *ABO simulation* ● *WBC differential*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● ABO problems ● WBC case studies
HLC02	● *I can identify terms related to blood clotting.* ● *I can build words and recognize combining terms used in blood system terminology.*	x Selected Response Constructed Response x Performance	**Lesson Progression and Standards Connection:** ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.*	**MandatoryLessons/Activities:** ● *Royal Hemophilia* ● *VIIi concentrate*
Pacing:	2 blocks		**CCSS Connections:**	**Assessments:**

		☐ Observation	● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	*Students will create a presentation about a clotting disorder of their c*hoosing
HL 1.2	● *I can identify various pathologic conditions affecting blood.* ● *I can describe various laboratory tests and clinical procedures used in hematologic disorders.* ● *I can apply new knowledge to understand medical terms in their proper contexts, such as medical reports and records.*	x Selected Response x Constructed Response x Performance ☐ Observation	**Lesson Progression and Standards Connection:** ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Compare the aging process among body systems.*	**Mandatory Lessons/Activities:** ● *Anemias-students compare normal vs abnormal red blood cells* ● *Sickle Case Study* ● *Bo*ne Marrow Biopsy
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Anemia quiz*
HL 1.1	● *I can identify the structures of the lymphatic and immune systems.* ● *I can understand/model how the lymphatic and immune systems work.*	x Selected Response ☐ Constructed Response x Performance ☐ Observation	**Lesson Progression and Standards Connection:** ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	**Mandatory Lessons/Activities:** ● *Complete lymphatics diagram* ● *Natural and Adaptive immunity*

Pacing:	2 blocks		**CCSS Connections:** ●	**Assessments:** ● *Vaccine Project-how did we wipe out smallpox? Why can't we wipe out polio?*
HLC02	● *I can learn the basic terminology, combining forms, and other word parts related to the lymphatic and immune system.*	x Selected Response x Constructed Response x Performance Observation	**Lesson Progression and Standards Connection:** ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.*	**Mandatory Lessons/Activity** ● *Page 567-interpreting medical cases*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *UConn practice quiz*
HL 1.2	● *I can identify laboratory tests, clinical procedures, and abbreviations relating to the lymphatic and immune systems.* ● *I can apply new knowledge to understanding medical terms in their proper context, such as medical reports and records.*	x Selected Response x Constructed Response x Performance Observation	**Lesson Progression and Standards Connection:** ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Compare the aging process among body systems.*	**Mandatory Lessons/Activities:** ● *RBC Morphology* ● *Sickle Test*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into	**Assessments:** ● *End of Unit Assessment* ● *UConn Assessment(2021-22)*

			categories or hierarchies, demonstrating understanding of the information or ideas.	

UNIT 10: Musculoskeletal System			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.1 Use knowledge of human structure and function to conduct healthcare roles. ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	Learn the structure and function of the musculoskeletal system.	**Bones:** Acetabulum, acromion, bone, bone depression, bone process, calcium, cancellous bone, cartilage, collagen, compact bone, cranial bones, diaphysis disk, epiphyseal plate, epiphysis, facial bones, fontanelle, foramen magnum, haversian canals, ligament, malleolus, manubrium, mastoid process, medullary cavity, metaphysis, e=olecranon, orthopedist, osseous tissue, ossification, osteoblast, osteoclast, periosteum, phosphorus, physiatrist, public symphysis, red bone marrow, ribs, sella turcica, sinus, styloid process, suture, temporomandibular joint, tendon, trabeculae, vertebra, xiphoid process, yellow bone marrow **Joints:** Articular cartilage, articulation, bursa, ligament, meniscus, suture joint, synovial cavity, synovial fluid, synovial joint, synovial membrane, tendon, **Muscles:** abduction, adduction, extension, fascia, flexion, insertion of a muscle, origin of a muscle, plantar flexion, pronation, rotation, striated muscle, supination, visceral muscle
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.2 Use knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.* ● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.*	Understand the medical terms utilized to describe diseases and disorders of the musculoskeletal system.	**Bones:** Ewing sarcoma, exostosis, fracture, osteogenic sarcoma, osteomalacia, osteomyelitis, osteoporosis, talipes **Joints:** arthritis, ankylosing spondylitis, gouty arthritis, osteoarthritis, rheumatoid arthritis, bunion,carpal tunnel syndrome, dislocation, ganglion cyst, herniation of an intervertebral disk, lyme disease, sprain, systemic lupus erythematosus **Muscles:** muscular dystrophy, polymyositis, antinuclear antibody test, erythrocyte

	● *Compare the aging process among body systems.*		sedimentation rate, rheumatoid factor test, serum calcium, serum creatine kinase, uric acid test, arthrocentesis, arthrography, arthroplasty
HLC02 Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.	n/a	Deepen academic understanding of medical terminology by applying and using common suffixes related to the musculoskeletal system.	**Bones:** calc/o, calci/o, kyph/o, lamin/o, lord/o, lumb/o, myel/o, orth/o, oste/o, scoli/o, spondyl/o, vertebr/o, -blast, -clast, -listhesis, -malacia, -physis, -porosis, -tome, acetabul/o, calcane/o, carp/o, clavicul/o, cost/o, crani/o, femor/o, fibul/o, humer/o, ili/o, ischi/o, malleol/o, mandibul/o, maxill/o, metacarp/o, metatars/o, olecran/o, patell/o, pelv/o, perone/o, phalang/o, pub/o, radi/o, scapul/o, stern/o, tars/o, tibi/o, uln/o **Joints:** ankyl/o, arthr/o, articul/o, burs/o, chondr/o, ligament/o, rheumat/o, synov/o, ten/o, tendin/o, -desis, -stenosis **Muscles:** fasci/o, fibr/o, leiomy/o, my/o, myocardi/o, myos/o, plant/o, rhabdomy/o, sarc/o, -asthenia, -trophy, ab-, ad-, dorsi-, poly-

UNIT 10: ESSENTIAL QUESTIONS

The musculoskeletal system includes the bones, muscles and joints. Bones provide the framework for the human body, joints are where bones come together, and muscles attach bones.

- What are the parts and functions of the musculoskeletal system?
- What pathologies or conditions can impact the musculoskeletal system?
- How are bones, muscles and joints connected?
- What are the prefixes, suffixes and combining terms used to describe the musculoskeletal system?

<table>
<tr><th>CTE Standard</th><th>Learning Targets: I can</th><th>Summative Assessment Strategy</th><th>Lesson Progression and Connection to ELA/Math CCSS</th><th>Common Learning Experiences and Assessments</th></tr>
<tr><td>HL 1.1</td><td>● I can define terms relating to the structure and function of bones.
● I can explain the process of bone formation and growth.
● I can locate and name the major bones of the body.</td><td rowspan="2"><table><tr><td>x</td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.
● Compare relationships among cells, tissues, organs and systems.
● Explain body planes, directional terms, quadrants and cavities
● Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.</td><td>Mandatory Lessons/Activities:
● Complete bones of the body diagram
● Complete bone diagram including marrow
● Complete muscle diagram</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● Bone and Muscle Practical</td></tr>
<tr><td>HL 1.2
HL C02</td><td>● I can analyze the combining forms, prefixes and suffixes used to describe bones.
● I can apply new knowledge to understanding medical terms in their proper contexts, such as</td><td><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.
● Analyze method to control spread of pathogenic</td><td>Mandatory Lessons/Activities:
● Virtual knee replacement
● Fracture lab</td></tr>
</table>

	medical reports or records. ● *I can explain various musculoskeletal disease conditions and terms related to bone fractures.*	x Performance Observation	*microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.*	
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● Students will p[repare a presentation of disease of the musculoskeletal system
HL 1.1	● *I can define terms relating to the structure and function of joints.* ● *I can apply new knowledge to understanding medical terms in their proper contexts, such as medical reports or records.*	x Selected Response x Constructed Response x Performance Observation	**Lesson Progression and Standards Connection:** ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	**Mandatory Lessons/Activities:** ● Lyme disease case study
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● UConn Practice Assessment

<table>
<tr>
<td>HL 1.2
HL C02</td>
<td>● I can analyze the combining forms, prefixes and suffixes used to describe joints.
● I can describe laboratory tests and clinical procedures relating to joints and the musculoskeletal system.</td>
<td rowspan="2"><table>
<tr><td></td><td>Selected Response</td></tr>
<tr><td>x</td><td>Constructed Response</td></tr>
<tr><td>x</td><td>Performance</td></tr>
<tr><td></td><td>Observation</td></tr>
</table></td>
<td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.
● Analyze method to control spread of pathogenic microorganisms.
● Contrast various types of immunities,
● Analyze body systems changes in light of diseases, disorders and wellness.
● Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</td>
<td>Mandatory Lessons?Activity
● Virtual knee replacement</td>
</tr>
<tr>
<td>Pacing:</td>
<td>2 blocks</td>
<td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td>
<td>Assessments:
● Knee stabilizer research project</td>
</tr>
<tr>
<td>HL 1.1</td>
<td>● I can define terms relating to the structure and function of muscles.
● I can apply new knowledge to understanding medical terms in their proper contexts, such as medical reports or records.</td>
<td rowspan="2"><table>
<tr><td>x</td><td>Selected Response</td></tr>
<tr><td>x</td><td>Constructed Response</td></tr>
<tr><td>x</td><td>Performance</td></tr>
<tr><td></td><td>Observation</td></tr>
</table></td>
<td>Lesson Progression and Standards Connection:
● Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.
● Compare relationships among cells, tissues, organs and systems.
● Explain body planes, directional terms, quadrants and cavities
● Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.</td>
<td>Mandatory Lessons/Activities:
● Exercise lab</td>
</tr>
<tr>
<td>Pacing:</td>
<td>2 blocks</td>
<td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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</td>
<td>Assessments:
● Treatment plan for muscle rehab</td>
</tr>
</table>

<table>
<tr><td></td><td></td><td></td><td>relevant to grades 11-12 texts and topics.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td></td></tr>
<tr><td>HL 1.2
HL C02</td><td>● I can analyze the combining forms, prefixes and suffixes used to describe muscles.
● I can describe laboratory tests and clinical procedures relating to muscles and the musculoskeletal system.</td><td><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.
● Analyze method to control spread of pathogenic microorganisms.
● Contrast various types of immunities,
● Analyze body systems changes in light of diseases, disorders and wellness.
● Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</td><td>Mandatory Lessons/Activities:
● ALS demonstration</td></tr>
<tr><td>Pacing:</td><td>1 block</td><td></td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● End of Unit Assessment
● UConn Assessment (2021-22)</td></tr>
</table>

UNIT 11: Skin and Sense Organs			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.1 Use knowledge of human structure and function to conduct healthcare roles. ● *Name the layers of the skin and accessory structures associated with the skin.* ● *Describe the function of each of the organs in the skin* ● *Identify major structure and function of the eye and ear* ● *Build medical words using combining forms related to dermatology, ophthalmology and audiology*	Learn structure and function of the skin,eye and ear	**Skin:**Epidermis, dermis, subcutaneous layer, keratin, melanocytes, sebaceous gland, sweat gland, hair follicle, adipocytes, lunula, cuticle, sebum, collagen, pore **Eye**:Biconvex,choroid,ciliary body,cone,conjunctiva,cornea,fovea centralis,fundus of the eye,iris,lens,macula,optic chiasm,optic disc, optic nerve,pupil, refraction, retina, rod, sclera, thalamus,vitreous humor **Ear:** accommodation, anterior chamber,aqueous humor,cerumen, cochlea,incus,malleus, organ of Corti, ossicle, pinna, stapes, vestibule,
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	*HL 1.2* Use knowledge of diseases and disorders to conduct health care roles. ● *identify lesions,signs,symptoms and pathology conditions related to the skin,eyes and ears* ● *Describe laboratory tests and clinical procedures that pertain to the skin,eyes and ears* ● *Recognize relevant abbreviations* ● *Apply knowledge to understanding medical terms in their proper contexts, such as medical reports and records*	Understand the medical terms utilized to describe diseases and disorders of the skin, eyes and ears	**Skin:** Sebaceous cyst, Tinea, paronychia, mycosis, Staphylococcus aureus, lesions-crust,cyst,erosion,fissure,macule,nodule,papule,polyp,pustule,ulcer,vesicle,wheal,alopecia, ecchymosis, petechiae,pruritus,acne,cellulitis,eczema,exanthematous viral disease, gangrene, impetigo, pyoderma, erythema infectiosum, scabies,SLE, psoriasis, keloid, vitiligo, urticaria, keratosis, verruca, malignant melanoma **Eye:** Hyperopia,myopia,cataract, chalazion, glaucoma, **Ear:** otitis media,tinnitus,vertigo, audiometry, cochlear implant, ear thermometer, otoscopy
HLC02 Use oral and written communication skills in creating,		Deepen academic understanding of medical	**Skin**: Erythem/o, cutane/o, ichthy/o,cauter/o,adip/o,

expressing and interpreting information and ideas including technical terminology and information.		terminology by applying and using common suffixes,prefixes and combining forms for skin, eye, and ear.	albin/o, xanth/o, cyan/o, jaund/o, cirrh/o, leuk/o, lute/o, melan/o, chlor/o, **Eye:** aque/o, blephar/o, conjunctiv/o, cor/o, corne/o, cycl/o, darl/o, ir/o, irid/o, kerat/o, lacrim/o, ocul/o, ophthalm/o, opt/o, optic/o, palpebr/o, papill/o, phac/o, phak/o, pupill/o, retin/o, scler/o, uve/o, vitre/o, ambly/o, dipl/o, glauc/o, mi/o, mydr/o, nyct/o, pho/o, presby/o, scot/o, xer/o, -opia, -opsia, -tropia **Ear:** acous/o, audio/ audit/o, aur/o, auricul/o, cochle/o, mastoid/o, myring/o, ossicul/o, ot/o, salping/o, staped/o, tympan/o, vestibul/o, -acusis, -meter, -otia,

UNIT 11: ESSENTIAL QUESTIONS

The skin and accessory organs make up the integumentary system.

- *What are the parts and functions of the integumentary system?*
- *What are the structures and functions of the eye and ear?*
- *How is the integumentary system important in maintaining homeostasis?*
- *Why is skin cancer so common? How can we protect ourselves from it?*
- *What is the relationship between the nervous system and sensory organs?*
- *Does your brain always perceive visual and auditory information correctly?*

<table>
<tr><th>CTE Standard</th><th>Learning Targets: I can</th><th>Summative Assessment Strategy</th><th>Lesson Progression and Connection to ELA/Math CCSS</th><th>Common Learning Experiences and Assessments</th></tr>
<tr><td>H 1.1</td><td>● I can explain the function of skin.
● I can name the layers of the skin and accessory structures associated with the skin.
● I can build medical words using the combining form that are related to the speciality of dermatology.</td><td rowspan="2"><table><tr><td>x</td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.
● Compare relationships among cells, tissues, organs and systems.
● Explain body planes, directional terms, quadrants and cavities
● Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.</td><td>Mandatory Lessons/Activities:
● Students will label a diagram of the skin and accessory organs
● Students will describe the functions of the major organs of the ear
● Students can describe the function of the skin in terms of homeostasis</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● Students can correctly identify layers of the skin and major accessory organs
● Students can describe the functions of the skin
● Students can describe the function of the major accessory organs associated with the skin</td></tr>
<tr><td>HL 1.2
HL C02</td><td>● I can identify lesions, signs, symptoms, and pathologic conditions that relate to the skin.
● I can apply new knowledge to understanding medical terms in</td><td><table><tr><td>x</td><td>Selected Response</td></tr><tr><td></td><td>Constructed Response</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.</td><td>Mandatory Lessons/ Activities:
● Alopecia story about Ryan Shazier
● Comic book pimple</td></tr>
</table>

	their proper contexts, such as medical reports or records.	x Performance Observation	● *Analyze method to control spread of pathogenic microorganisms.* ● *Contrast various types of immunities,* ● *Analyze body systems changes in light of diseases, disorders and wellness.* ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.*	
Pacing:	1 block		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Students will choose a pathologic condition of the skin and prepare a presentation including symptoms,treatments,and prognosis*
H 1.1	● *I can identify the locations and functions of the major parts of the eye.* ● *I can name the combining forms, prefixes, and suffixes most commonly used to describe the eye and its parts.*	Selected Response x Constructed Response x Performance Observation	**Lesson Progression and Standards Connection:** ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	**Mandatory Lessons/Activities:** ● *Students will label the structures of the eye* ● *Students can explain the major functions of the structures of the eye*
Pacing:	2 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Eye practical*

<table>
<tr>
<td>HL 1.2
HL C02.</td>
<td>● I can describe the abnormal conditions that may affect the eye.
● I can describe clinical procedures that pertain to ophthalmology.
● I can apply new knowledge to understanding medical terms in their proper contexts, such as medical reports or records.</td>
<td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td>
<td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.
● Analyze method to control spread of pathogenic microorganisms.
● Contrast various types of immunities,
● Analyze body systems changes in light of diseases, disorders and wellness.
● Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</td>
<td>Mandatory Lessons/Activities:
● Students will assess visual acuity
● Students will asses color vision
● Students will assess depth perception
● Glaucoma simulation</td>
</tr>
<tr>
<td>Pacing:</td>
<td>2 blocks</td>
<td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td>
<td>Assessments:
● End of Unit Assessment
● UConn Assessment (2021-22)</td>
</tr>
<tr>
<td>HL 1.1</td>
<td>● I can identify the locations and functions of the major parts of the ear.
● I can name the combining forms, prefixes, and suffixes most commonly used to describe the ear and its parts.</td>
<td rowspan="2"><table><tr><td>x</td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td>
<td>Lesson Progression and Standards Connection:
● Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.
● Compare relationships among cells, tissues, organs and systems.
● Explain body planes, directional terms, quadrants and cavities
● Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.</td>
<td>Mandatory Lessons/Activities:
● Students will label the major parts of the ear
● Students can explain the function of the structures of the ear</td>
</tr>
<tr>
<td>Pacing:</td>
<td>2 blocks</td>
<td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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</td>
<td>Assessments:
● Students can correctly label and describe the structures of the ear</td>
</tr>
</table>

<table>
<tr><td></td><td></td><td></td><td>relevant to grades 11-12 texts and topics.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td></td></tr>
<tr><td>HL 1.2
HL C02</td><td>● I can describe the abnormal conditions that may affect the ear.
● I can describe clinical procedures that pertain to otology.
● I can apply new knowledge to understanding medical terms in their proper contexts, such as medical reports or records.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classifications, causes, diagnosis, therapies, and care rehabilitation to include biotechnological applications.
● Analyze method to control spread of pathogenic microorganisms.
● Contrast various types of immunities,
● Analyze body systems changes in light of diseases, disorders and wellness.
● Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</td><td>Mandatory Lessons/Activities:
● Students will asses hearing</td></tr>
<tr><td>Pacing:</td><td>2 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● Students will prepare a presentation about cochlear implants including major structures involved
● End of Unit Assessment
● UConn Assessment (2021-22)</td></tr>
</table>

UNIT 12: Endocrine System			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.1 Use knowledge of human structure and function to conduct healthcare roles. ● *Describe the basic structures and functions of cells, tissues, organs and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.*	I can describe the structure and function of the glands and hormones of the endocrine system. I can describe the importance of the endocrine system in terms of maintaining homeostasis	**Structures:**Adrenal cortex, adrenal medulla, ovaries, pancreas, parathyroid glands, pituitary gland, testes, thyroid gland, **Hormones:** adrenaline, adrenocorticotropic hormone-ACTH, aldosterone, androgen, ADH-antidiuretic hormone, calcitonin, cortisol, estradiol, estrogen, FSH-follicle stimulating hormone, glucagon, GH-growth hormone, insulin, LH-luteinizing hormone, norepinephrine, OT-oxytocin, PTH-parathyroid hormone, progesterone, prolactin, homeostasis, steroid, target tissue, electrolyte, hypothalamus
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.2: Utilize knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classification(s), causes, diagnoses, therapies and care/rehabilitation to include biotechnological applications.* ● *Analyze body system changes in light of diseases, disorders and wellness. Compare the aging process among the body systems.*	Understand the medical terms utilized to describe diseases and disorders of the endocrine system	**Thyroid**-hypersecretion,hyposecretion,carcinomas **Adrenal cortex**-adrenal virilism, Cushings,Addisons, **Pancreas**-hypoglycemia, Type 1 and Type 2 diabetes **Pituitary**-acromegaly, gigantism,dwarfism,DI
HLC02 Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.		Deepen understanding of medical terms Associated with the endocrine system.	Aden/o, adrenal/o,gonad/0,pancreat/o,pituitar/o,thyr/o, andr/o,calc/o,cortic/o,gluc/o, glyc/o, home/o, kal/i, lact/o,natr/o

UNIT 12: ESSENTIAL QUESTIONS

The endocrine system is an information signalling system that uses blood vessels as information channels to transport chemical messages (hormones).

- What are the parts and functions of the endocrine system?
- What pathologies or conditions can impact the endocrine system?
- What are the prefixes, suffixes and combining terms used to describe the glands of the endocrine system?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments
HL 1.1	● *I can identify the endocrine glands and their hormones.* ● *I can explain the functions of hormones in the human body.*	☐ Selected Response ☐ Constructed Response ☐ Performance ☐ Observation	**Lesson Progression and Standards Connection:** ● *Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.* ● *Compare relationships among cells, tissues, organs and systems.* ● *Explain body planes, directional terms, quadrants and cavities* ● *Analyze the interdependence of body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.*	Mandatory Lessons/Activities: ● *Students will complete diagram of major glands of the endocrine system and hormones* ● *Students will describe hormone functions and target organs*
Pacing:	1 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *Students can correctly label endocrine diagram and describe function of hormones as well as target organs*
HL 02	● *I can analyze medical terms related to the endocrine glands and their hormones.* ● *I can name the combining forms, prefixes, and suffixes most commonly used to describe the endocrine glands and its parts.*	☐ Selected Response ☐ Constructed Response ☐ Performance ☐ Observation	**Lesson Progression and Standards Connection:** ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.*	**Mandatory Lessons/Activities:** ● *Case study Cushing's Disease*

<table>
<tr><td>Pacing:</td><td>1 block</td><td></td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● UConn Practice Quiz</td></tr>
<tr><td>HL 1.2</td><td>● I can identify abnormal conditions resulting from excessive or deficient secretions of the endocrine glands.
● I can describe laboratory tests and clinical procedures related to endocrinology, and recognize relevant abbreviations.</td><td rowspan="2"><table><tr><td></td><td>Selected Response</td></tr><tr><td></td><td>Constructed Response</td></tr><tr><td></td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classification(s), causes, diagnoses, therapies and care/rehabilitation to include biotechnological applications.
● Analyze body system changes in light of diseases, disorders and wellness. Compare the aging process among the body systems.</td><td>Mandatory Lessons/Activities:
● Endocrine children’s book</td></tr>
<tr><td>Pacing:</td><td>1 block</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● End of Unit Assessment
● UConn Assessment (2021-22)</td></tr>
</table>

UNIT 13: Cancer Medicine, Radiology, Pharmacology			
UNWRAPPED STANDARDS			
Advance CTE Standard	**Performance Elements**	**Key Concepts/Big Ideas**	**Academic Vocabulary**
HCL01.01 Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. In addition to State high school graduation requirements.	HL 1.2: Utilize knowledge of diseases and disorders to conduct health care roles. ● *Compare selected diseases/disorders including respective classification(s), causes, diagnoses, therapies and care/rehabilitation to include biotechnological applications.* ● *Analyze body system changes in light of diseases, disorders and wellness. Compare the aging process among the body systems.*		**Cancer:** Adjuvant chemotherapy, alkylating agents, anaplasia, antibiotics, antimetabolites, antimitotics, apoptosis, benign tumor, brachytherapy, carcinogens, carcinoma, chemotherapy, dedifferentiation, DNA, electron beams, encapsulated, external beam irradiation, fields, fractionation, genetic screening, grading tumors, gray, gross description of tumors, immunotherapy, infiltrative, invasive, irradiation, linear accelerator, malignant tumor, mesenchymal, metastasis, mitosis, mixed-tissue tumors, modality, morbidity, mucinous, mutation, neoplasm, nucleotide, oncogene,palliative, radiation, relapse, RNA, sarcoma, sessile, solid tumor, **Radiology:** computed tomography, contrast studies, gamma camera, gamma rays, half-life, interventional radiology, in vitro, in vivo, ionization, magnetic resonance imaging, nuclear medicine, positron emission tomography, radioimmunoassay, radioisotope, radiolabeled compound, radiology, radionuclide, radiolucent, radiopaque, radiopharmaceutical, scan, scintigraphy, SPECT, tagging, tracer studies, ultrasonography, ultrasound transducer, uptake, ventilation-perfusion study **Pharmacology:** addiction, additive action,aerosol, anaphylaxis, antagonistic action, antidote, brand name, chemical name, contraindications, controlled substances, dependence, dose, food and drug administration, generic name, iatrogenic idiosyncratic reaction, inhalation, medicinal chemistry, molecular pharmacology, oral administration, parenteral administration, topical application, toxicity, vitamin
HLC02 Use oral and written communication skills in creating,			**Cancer:**alveol/o, cac/o, carcin/o, cauter/o, chem/o, cry/o, cyst/o, fibr/o, follicul/o, fung/i, medull/o,

expressing and interpreting information and ideas including technical terminology and information.			mucos/o, mut/a, mutagen/o, necr/o, neur/o. onc/o, papill/o, plas/o, ple/o, polyp/o, prot/o, radi/o, sarc/o, scirrh/o, xer/o, -blastoma, -genesis, -oma, -plasia, -plasm, -suppression, -therapy, ana-, apo-, brachy-, epi-, meta-, neo-, tele- **Radiology:**is/o, pharmaceut/o, radi/o, son/o, therapeut/o, vitr/o, viv/o, -gram, -graphy, -lucent, -opaque, echo-, ultra- **Pharmacology:**aer/o, alges/o, bronch/o, chem/o, cras/o, cutane/o, derm/o, erg/o, esthes/o, hist/o, hypn/o, iatr/o, lingu/o, myc/o, narc/o, or/o, pharmac/o, prurit/o, pyret/o, thec/o,tox/o, toxic/o, vas/o, ven/o, vit/o, ana-, anti-, contra-, par-, syn-

UNIT 13: ESSENTIAL QUESTIONS

Treating patients requires an understanding of the treatment options and types found in 21st century medicine. This unit provides students with access to medical terminology to support their understanding of cancer medicine, radiology and pharmacology.

- Are all cancers incurable?
- What diagnostic procedures to doctors use to identify and stage tumors
-

<table>
<tr><th>CTE Standard</th><th>Learning Targets: I can</th><th>Summative Assessment Strategy</th><th>Lesson Progression and Connection to ELA/Math CCSS</th><th>Common Learning Experiences and Assessments</th></tr>
<tr><td>HL 1.2
HL 02</td><td>● I can identify medical terms that describe the growth and spread of cancer.
● I can recognize terms that are related to the causes, treatment and diagnosis of cancer.
● I can analyze medical terms related to cancer and cancer treatment.</td><td rowspan="2"><table><tr><td>x</td><td>Selected Response</td></tr><tr><td></td><td>Constructed Response</td></tr><tr><td>x</td><td>Performance</td></tr><tr><td></td><td>Observation</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classification(s), causes, diagnoses, therapies and care/rehabilitation to include biotechnological applications.
● Analyze body system changes in light of diseases, disorders and wellness. Compare the aging process among the body systems.
● Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.</td><td>Mandatory Lessons/Activities:
● Students can describe carcinogens in terms of body system affected
● Students can describe genetic factors that can lead to cancer
● Students will compare and contrast normal cells/tissue from cancer cells/tissue</td></tr>
<tr><td>Pacing:</td><td>1 blocks</td><td>CCSS Connections:
● CCSS.ELA-LITERACY.RST.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.
● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</td><td>Assessments:
● Carcinogen Comic Book</td></tr>
<tr><td>HL 1.2
HL 02</td><td>● I can list the physical properties of an x-ray.
● I can identify diagnostic techniques used by radiologists.
● I can name x-ray views and patient positions.</td><td><table><tr><td>x</td><td>Selected Response</td></tr><tr><td>x</td><td>Constructed Response</td></tr></table></td><td>Lesson Progression and Standards Connection:
● Compare selected diseases/disorders including respective classification(s), causes, diagnoses, therapies and care/rehabilitation to include biotechnological applications.
● Analyze body system changes in light of</td><td>Mandatory Lessons/Activities:
● X-Ray Lab
● Virtual radiation therapy</td></tr>
</table>

	● *I can recognize terms that are related to radiology.* ● *I can analyze medical terms related to radiology.*	x Performance Observation	*diseases, disorders and wellness. Compare the aging process among the body systems.* ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.*	
Pacing:	1 blocks		**CCSS Connections:** ● *CCSS.ELA-LITERACY.RST.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.* ● *CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.*	**Assessments:** ● *UConn practice assessment*
HL 1.2 HL 02	● *I can describe the subspecialities of pharmacology.* ● *I can differentiate among the various classes of drugs and name their primary actions.* ● *I can define medical terms using combining forms and prefixes that relate to pharmacology.*	Selected Response x Constructed Response x Performance Observation	**Lesson Progression and Standards Connection:** ● *Compare selected diseases/disorders including respective classification(s), causes, diagnoses, therapies and care/rehabilitation to include biotechnological applications.* ● *Analyze body system changes in light of diseases, disorders and wellness. Compare the aging process among the body systems.* ● *Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information.*	**Mandatory Lessons/Activities:** ● Alka Seltzer Lab ● Sunscreen lab ● Antibiotic lab
Pacing:	1 blocks		**CCSS Connections:** ● CCSS.ELA-LITERACY.RST.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. ● CCSS.ELA-LITERACY.RST.11-12.5-Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	**Assessments:** ● *End of Unit Assessment* ● *UConn Assessment (2021-22)*

Resources and Additional Considerations			
COMMON MISCONCEPTIONS	**PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT**	**ADVANCED STANDARDS FOR STUDENTS WHO HAVE DEMONSTRATED PRIOR MASTERY**	**OPPORTUNITIES FOR STUDENT-DIRECTED LEARNING WITHIN THE UNIT**
	Biology (ACA)		Application of content and analysis of case studies.
RESOURCES			
Text: *The Language of Medicine* (11th Edition) Davi-Ellen Chabner Health Science Simulators-CNA kit			