

Anatomy and Physiology Curriculum Alignment

Subject/Topic: BCC Bio 101

Unit#:

Month:

Standards	Unit/Topic	Essential Knowledge: What do students absolutely need for the next level?	Resources Used	Assessment
	Body Orientation terms	<p>SSBAT to communicate effectively about the body using orientation terminology.</p> <p>SSBAT locate parts of the body when give the appropriate orientation terms.</p>	<p>Guided notes</p> <p>Lab #2</p>	<p>Body orientation quiz</p> <p>Lab #2</p>
	Unit 1 Biochemistry	<p>SSBAT to determine the polymer when given the monomers for the four organic molecules (proteins, carbohydrates, lipids, and nucleic acids).</p> <p>SSBAT determine the monomers when given the polymer.</p> <p>SSBAT define dehydration synthesis and hydrolysis.</p> <p>SSBAT draw and label all the</p>	<p>Guided notes-much of this information is review from biology.</p>	<p>Exam 1 Biochemistry/ Cell exam</p>

		<p>components of a lock-and-key model.</p> <p>SSBAT identify the four factors that affect enzyme activity.</p>		
	Unit 2/Cells	<p>SSBAT recognize organelles within a cell.</p> <p>SSBAT explain the function of each organelle.</p> <p>SSBAT compare mitosis and meiosis.</p>	<p>Guided notes</p> <p>3D Cell Project Lab#5 reference only</p> <p>Cell organelles</p>	<p>Exam 1 Biochemistry/ Cells</p> <p>Organelle function quiz</p>
	<p>Unit 3 Cell/Tissue</p> <p>A. Identification</p>	<p>SSBAT identify the type of cell they are looking at on the microscope slide.</p> <p>SSBAT identify where this type of cell is located in the body.</p> <p>SSBAT explain the functions of these types of cells within the body.</p>	<p>Guided notes</p> <p>Fill-in study guide</p> <p>Lab #7 and 8-reference only</p>	Cell/Tissue Test
	B. Bones	SSBAT identify individual bones and skull sutures by name (correct spelling is required).	<p>Bone diagrams:</p> <ul style="list-style-type: none"> -hand -foot -Skull -appendicular skeleton -axial skeleton 	<p>Bone diagram quizzes</p> <p>Bone identification test</p>

		<p>SSBAT identify where specific bones would be located in the body.</p> <hr/> <p>SSBAT identify the structure of a bone.</p> <p>SSBAT explain how a bone grows in length and diameter.</p> <p>SSBAT define osteoporosis, identify the risk factors.</p> <p>SSBAT explain the function of osteoclasts and osteoblasts and the protective effects of estrogen.</p> <p>SSBAT list ways to prevent osteoporosis.</p>	<p>Lab #14and 15-reference only</p> <hr/> <p>Guided notes</p> <p>Lab #13</p> <p>Guided notes</p> <p>Guided notes</p> <p>Guided notes</p> <p>Guided notes/research</p>	<p>Exam 2 Bone/Muscle Essay Exam</p> <p>Lab #13</p>
	C. Muscles	<p>SSBAT identify muscles and major muscle groups by correct scientific name(spelling counts)</p> <hr/> <p>SSBAT identify the anatomy of a muscle from a macro to microscopic level.</p>	<p>Muscle diagrams</p> <p>lab#18,19,20,21 reference only</p> <hr/> <p>Guided notes</p> <p>Lab#17</p>	<p>Muscle identification test</p> <hr/> <p>Exam 2 Bone/Muscle Essay Exam</p> <p>Lab #17</p>

		SSBAT explain(essay) how a muscle contracts and relaxes.	Guided notes Lab#22	Lab #22
		SSBAT explain(essay) how and why rigor mortis occurs.	Guided notes	
	Unit 3/Nervous System	SSBAT identify major parts of the brain.	Guided notes Lab#25	Exam #3 Nervous System Lab#25
		SSBAT explain the functions of the major parts of the brain.		
		SSBAT identify the structures of an axon.	Guided notes Lab#23	Lab #23
		SSBAT explain how a nerve impulse occurs.(essay)	Guided notes	
		SSBAT explain how synapse occurs.(essay)	Guided notes Lab #10	Lab #10
		SSBAT explain how drugs affect the synapse and can lead to chemical addiction, withdrawal symptoms and overdose(essay)	Guided notes	
	Unit 4 Body Systems -Digestive	SSBAT identify the organs of the digestive	Guided notes Lab #41/42	Exam 4 Human Body Systems

		<p>system.</p> <p>SSBAT hypothesize why we do not digest our own intestines.</p>		<p>Lab #41</p>
	<p>Circulatory</p>	<p>SSBAT identify the structures of the circulatory system.</p> <p>SSBAT identify what each section of a normal ECG means.</p> <p>SSBAT explain how and why the circulatory functions.</p>	<p>Guided notes Lab#35,36 reference only</p> <p>Lab#37</p>	<p>Lab#37</p>
	<p>Respiratory</p>	<p>SSBAT identify the structures of the respiratory system.</p> <p>SSBAT explain breathing as a negative feedback mechanism (essay)</p> <p>SSBAT explain how the circulatory and respiratory systems function together.</p>	<p>Guided notes Lab #39</p> <p>Guided notes</p> <p>Discussion</p>	<p>Lab#39</p>
	<p>Excretory</p>	<p>SSBAT identify the organs of the excretory system.</p> <p>SSBAT explain the process of</p>	<p>Guided notes Lab #43/44 reference only</p>	

		<p>urine formation. (essay)</p> <p>SSBAT list in order the pathway of urine through the urinary system.</p>		
	<hr/> <p>Integumentary (skin)</p>	<hr/> <p>SSBAT identify the parts of the skin.</p> <p>SSBAT explain why acne is a frequent occurrence for teenagers based on how the skin functions.</p>	<hr/> <p>Guided notes</p> <p>Skin model discussion</p> <p>Lab #11</p>	<hr/> <p>Lab #11</p>
	<hr/> <p>Endocrine</p>	<hr/> <p>SSBAT identify the endocrine organs, the hormones they produce, and their functions.</p>	<hr/> <p>Guided notes</p> <p>Endocrine chart</p> <p>Lab #33</p>	<hr/> <p>Lab#33</p>
	<hr/> <p>Reproductive</p>	<hr/> <p>SSBAT identify the male and female structures of the reproductive system.</p> <p>SSBAT explain the functions of the reproductive structures.</p> <p>SSBAT explain the menstrual cycle as a negative feedback mechanism. (essay)</p>	<hr/> <p>Guided notes</p> <p>Lab #45 reference only</p>	<hr/>