

Concepts of Biology BIOL111 Course Outcome Guide (COG)

Course:	BIOL 111 Concepts of Biology	Credits:	4	Date updated	April 2016
Course Description:	<p>This is an introductory level non-majors transferable class. It covers major concepts in biology; chemistry of life, cellular biology, ecology, human systems, and disease. 1. Basic science literacy, possibly including superficial coverage of cell biology, ecology, human anatomy and physiology, evolution, genetics, and environmental biology. 2. Understanding how science informs cultural perspectives. 3. Understanding the relationship among levels of biological information. 4. Understanding the unity and diversity of life forms. 5. Comprehending methods of inquiry and technology and the applications for society. 6. Integrating knowledge and ideas in science. 7. Understanding and utilizing scientific knowledge</p> <p>Co-requisite BIOL 111L Concepts of Biology Lab</p>				
Concepts and Issues	Process Skills	Assessment Tasks	Intended Outcomes		
			Course	General Education or Program	Institutional
<p>1. Chemistry of Life Including Atoms Molecules Bonding and Viruses</p> <p>2. Cell Biology Structure and Function Eukaryotic Prokaryotic</p> <p>3. Human Systems Structure and Function.</p> <p>4. Ecology and selected Biomes: Marine Tropical Rain Forest Prairie</p>	<p>Study effectively</p> <p>Use scientific instruments safely and appropriately including microscopes and scalpels.</p> <p>Know Atomic structure, bonding, Molecular Structure and how this leads to chemical properties and biological functions. Know the role of biological molecules in living organisms.</p> <p>Know and identify the components of cells (eukaryotic and prokaryotic) and viruses also explain their functions. Understand</p>	<p>1. Complete assignments of readings and worksheets, lab worksheets(“portfolio”), term paper, study guides, movies and worksheets.</p> <p>2. Lecture and lab quizzes.</p> <p>3.Lecture and lab exams with objective and subjective questions.</p> <p>4. Lab attendance and participation.</p>	<p>1. Demonstrate the safe appropriate use of scientific instruments such as a microscope and scalpel .</p> <p>2. Differentiate factual information from opinion and pseudo-science by practicing methods used by biological scientists</p> <p>3. Practice the application of biological information to solve problems and in life (personal and professional).</p>	<p>1. Students will use reasoning skills to analyze and solve problems.</p> <p>2. Students will apply health-related knowledge to physical and mental well-being.</p>	<p>1. Students will use reasoning skills to analyze and solve problems.</p> <p>2. Students will apply health-related knowledge to physical and mental well-being.</p>

	<p>the relationship between cell structure and function.</p> <p>Discuss, compare and contrast Cellular Respiration and Photosynthesis.</p> <p>Describe the processes by which materials are transported across cell membranes</p> <p>Describe and list examples of viruses, bacterial, fungi and Protista</p> <p>Describe common diseases/disorders of the human body.</p> <p>Describe the components, structure and function of each human system.</p> <p>Discuss the basic ecology concepts.</p> <p>Describe the Marine, Prairie, Tropical Rain Forest ecosystems. Recognize and describe common organisms found in each and their uses. Be able to classify</p>				
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	<p>the organisms. Describe how their structure relates to the function in their habitat.</p> <p>Integrate the process of evolution in the development and adaptation of living organisms.</p>				
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