

## Curriculum Mapping

**School: Illini Bluffs High School**

**School Year: 2009-2010**

**Course: Biology II**

**Grade Level: Juniors & Seniors**

Classes	ILS	Content	Objectives	Assessments	Resources
<b>4-5</b>	11.A 12.A 13.A	Genetics	<ul style="list-style-type: none"> <li>-Explain the purpose of selective breeding</li> <li>-Describe two techniques used in selective breeding</li> <li>-Explain why breeders try to induce mutations</li> <li>-Explain how scientists manipulate DNA</li> <li>-Describe what happens during transformation</li> <li>-Describe the usefulness of some transgenic organisms to humans</li> <li>-Describe the main steps of cloning</li> <li>-Explore the ethics of cloning and stem cell research</li> </ul>	Worksheets Labs Quizzes Tests	Textbook Power Points Handouts Internet
<b>8-10</b>	11.A 12.A 12.B 13.A 13.B	Bacteria	<ul style="list-style-type: none"> <li>-Identify the parts of a microscope</li> <li>-Demonstrate proper use of a microscope</li> <li>-Explain how the two groups of prokaryotes differ</li> <li>-Describe the structure and function of a typical bacterial cell</li> <li>-Describe the methods that are used to identify prokaryotes</li> <li>-Demonstrate various techniques of culturing bacteria</li> <li>-Explain the importance of bacteria</li> <li>-Explain how bacteria cause disease</li> <li>-Identify various bacterial diseases</li> <li>-Explain how bacterial growth can be controlled</li> <li>-Explain what an antibiotic is and how it works</li> <li>-Explain antibiotic resistance</li> <li>-Identify the factors that are leading to antibiotic resistance</li> </ul>	Worksheets Labs Quizzes Tests	Textbook Power Points Handouts Internet
<b>5-6</b>	12.A	Viruses	<ul style="list-style-type: none"> <li>-Describe the structure of a virus</li> </ul>	Worksheets	Textbook

	12.B 13.A		<ul style="list-style-type: none"> <li>-Explain why viruses are not considered living organisms</li> <li>-Explain the differences between the lysogenic cycle and the lytic cycle</li> <li>-Explain how viruses cause infection</li> <li>-Identify various viral diseases</li> <li>-Explain the various mechanisms by which a virus can be spread</li> <li>-Explain how vaccinations work in protecting against viral infections</li> </ul>	Labs Quizzes Tests	Power Points Handouts Internet
<b>6-7</b>	12.A 12.B 13.A	Protozoans	<ul style="list-style-type: none"> <li>-Explain what a protist is</li> <li>-Describe the major phyla of animal-like protists</li> <li>-Describe the major phyla of unicellular algae</li> <li>-Describe the ecological roles of unicellular algae</li> <li>-Describe the major phyla of multicellular algae</li> <li>-Identify some human uses of algae</li> <li>-Differentiate between funguslike protists and fungi</li> <li>-Describe slime molds and water molds</li> <li>-Describe the ecological roles of funguslike protists</li> <li>-Identify various diseases caused by protozoans</li> </ul>	Worksheets Labs Quizzes Tests	Textbook Power Points Handouts Internet
<b>5-6</b>	12.A 12.B	Fungi	<ul style="list-style-type: none"> <li>-Identify the defining characteristics of fungi</li> <li>-Describe the main structures of a fungus</li> <li>-Explain how fungi reproduce</li> <li>-Identify the characteristics of the four main groups of fungi</li> <li>-Explain the ecological role of fungi</li> <li>-Identify various diseases caused by fungi</li> </ul>	Worksheets Labs Quizzes Tests	Textbook Power Points Handouts Internet
<b>16-17</b>	12.A 12.B	Invertebrates	<ul style="list-style-type: none"> <li>-Explain the body plans of the eight major phyla of invertebrates</li> <li>-Identify the defining characteristics of the major classes of each phyla of invertebrates</li> <li>-Describe how the eight different phyla of invertebrates carries out essential functions</li> <li>-Describe the ecology of the eight different phyla of invertebrates</li> </ul>	Worksheets Labs Quizzes Tests Dissections	Textbook Power Points Handouts Internet
<b>16-17</b>	12.A	Vertebrates	<ul style="list-style-type: none"> <li>-Identify the basic structures of each of the six largest classes of vertebrates</li> </ul>	Worksheets	Textbook

	12.B		<ul style="list-style-type: none"> <li>-Explain how each of each of the six largest classes of vertebrates are adapted for life in their particular environments</li> <li>-Explain how each of the six largest classes of vertebrates carry out essential life functions</li> </ul>	<ul style="list-style-type: none"> <li>Labs</li> <li>Quizzes</li> <li>Tests</li> <li>Dissections</li> </ul>	<ul style="list-style-type: none"> <li>Power Points</li> <li>Handouts</li> <li>Internet</li> </ul>
<b>12-13</b>	12.A 12.B	Botany	<ul style="list-style-type: none"> <li>-Describe the three phyla of spore bearing plants</li> <li>-Identify the stages in the life cycle of ferns</li> <li>-Describe the reproductive adaptations of seed plants</li> <li>-Identify the four groups of gymnosperms</li> <li>-Identify the characteristics of angiosperms</li> <li>-Explain what monocots and dicots are</li> <li>-Describe the three different life spans of angiosperms</li> <li>-Describe the organs and tissues of vascular plants</li> <li>-Describe the two main types of roots</li> <li>-Describe the different functions of roots</li> <li>-Describe the three main functions of stems</li> <li>-Explain how primary growth and secondary growth occur in stems</li> <li>-Describe how the structure of a leaf enables it to carry out photosynthesis</li> <li>-Describe how gas exchange takes place in a leaf</li> <li>-Explain how materials are transported throughout a plant</li> <li>-Identify the reproductive structures of gymnosperms and angiosperms</li> <li>-Explain how pollination and fertilization differs between angiosperms and gymnosperms</li> </ul>	<ul style="list-style-type: none"> <li>Worksheets</li> <li>Labs</li> <li>Quizzes</li> <li>Tests</li> <li>Projects</li> </ul>	<ul style="list-style-type: none"> <li>Textbook</li> <li>Power Points</li> <li>Handouts</li> <li>Internet</li> </ul>