

# OLEAN HIGH SCHOOL

## Living Environment

**Biology: The Study of Life, Prentice Hall**

**Other Resources: Laboratory Manual / Review Book**

### Grades 9-12

Month	Topic Content	Skills	Concepts	Major Assessments	Learning Standards	Resource/ Text Page
Sept.	<ul style="list-style-type: none"> <li>The Nature of Life</li> <li>Biology as a Science</li> <li>Basic Chemistry</li> <li>Chemical Compounds of Life</li> <li>The Cell</li> </ul>	<ul style="list-style-type: none"> <li>Basic Vocabulary</li> <li>Lab Techniques and Cooperative Learning</li> <li>Reading and Problem Solving</li> <li>Note Taking</li> <li>Critical Thinking</li> <li>Class Participation</li> <li>Apply Scientific Concepts &amp; Principles</li> </ul>	<ul style="list-style-type: none"> <li>Life Processes</li> <li>Tools of Biology</li> <li>Atomic Structure</li> <li>Chemical Bonding</li> <li>Acids &amp; Bases</li> <li>Biochemistry</li> <li>Cell Structure</li> </ul>	<ul style="list-style-type: none"> <li>Exams</li> <li>Homework</li> <li>Lab Reports</li> <li>Quizzes</li> <li>Class Participation</li> </ul>	1.2d, Standard 1 Performance Indicators 1,2,3, 6.1c, 2.1f, 2.1g, 5.1f, 5.1g, 6.1c, 1.2a, 1.2e, 1.2f, 1.2g, 1.2h, 1.2i, 5.1b, 5.1e	<b>Text – Chaps. 1 - V</b>
Oct.	<ul style="list-style-type: none"> <li>Cellular Respiration</li> <li>Classification</li> <li>Nutrition</li> <li>Transport</li> <li>The Blood and Immunity</li> </ul>	<ul style="list-style-type: none"> <li>Basic Vocabulary</li> <li>Lab Techniques and Cooperative Learning</li> <li>Reading and Problem Solving</li> <li>Note Taking</li> <li>Critical Thinking</li> <li>Class Participation</li> <li>Apply Scientific Concepts &amp; Principles</li> </ul>	<ul style="list-style-type: none"> <li>Respiration Types</li> <li>Taxonomy</li> <li>Nutrients &amp; Digestion</li> <li>Circulation</li> <li>Blood Types</li> <li>Immune System</li> </ul>	<ul style="list-style-type: none"> <li>Exams</li> <li>Homework</li> <li>Lab Reports</li> <li>Quizzes</li> <li>Class Participation</li> </ul>	1.2h, 5.1a, 5.1c, 5.1d, 5.1e, Appendix A Lab Checklist, Standard 1, 1.2b, 1.2h, 1.3a, 5.2h, 1.2b, 1.3a1.2b, 1.3a, 5.2c. 5.2d, 5.2f, 5.2g	<b>Text – Chaps. VI - X</b>
Nov.	<ul style="list-style-type: none"> <li>Gas Exchange</li> <li>Excretion</li> <li>Support and Locomotion</li> </ul>	<ul style="list-style-type: none"> <li>Basic Vocabulary</li> <li>Lab Techniques and Cooperative Learning</li> <li>Reading and Problem Solving</li> <li>Note Taking</li> <li>Critical Thinking</li> <li>Class Participation</li> <li>Apply Scientific Concepts &amp; Principles</li> </ul>	<ul style="list-style-type: none"> <li>Respiratory System</li> <li>Waste Removal</li> <li>Muscles &amp; Skeleton</li> </ul>	<ul style="list-style-type: none"> <li>Exams</li> <li>Homework</li> <li>Lab Reports</li> <li>Quizzes</li> <li>Class Participation</li> </ul>	1.2 b, 1.3a	<b>Text – Chaps. XI -XIII</b>
Dec.	<ul style="list-style-type: none"> <li>Nervous Regulation</li> <li>Human Nervous System</li> <li>Chemical Regulation</li> </ul>	<ul style="list-style-type: none"> <li>Basic Vocabulary</li> <li>Lab Techniques and Cooperative Learning</li> <li>Reading and Problem Solving</li> </ul>	<ul style="list-style-type: none"> <li>Nerve Cells</li> <li>CNS &amp; PNS</li> <li>Sense Receptors</li> <li>Glands &amp; Hormones</li> </ul>	<ul style="list-style-type: none"> <li>Exams</li> <li>Homework</li> <li>Lab Reports</li> <li>Quizzes</li> <li>Class</li> </ul>	1.2b, 1.2j, 1.3a, 5.3a, 1.2a, 5.1g,1.2c, 5.1g, 5.2b	<b>Text – Chaps. XIV - XVI</b>

		<ul style="list-style-type: none"> <li>• Note Taking</li> <li>• Critical Thinking</li> <li>• Class Participation</li> <li>• Apply Scientific Concepts &amp; Principles</li> </ul>		Participation		
Jan.	<ul style="list-style-type: none"> <li>• Plant Nutrition</li> <li>• Plant Structure</li> <li>• Plant Function</li> </ul>	<ul style="list-style-type: none"> <li>• Basic Vocabulary</li> <li>• Lab Techniques and Cooperative Learning</li> <li>• Reading and Problem Solving</li> <li>• Note Taking</li> <li>• Critical Thinking</li> <li>• Class Participation</li> <li>• Apply Scientific Concepts &amp; Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Photosynthesis</li> <li>• Roots, Stems, Leaves</li> <li>• Regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Exams</li> <li>• Homework</li> <li>• Lab Reports</li> <li>• Quizzes</li> <li>• Class Participation</li> </ul>	5.1a, 5.1b, Appendix A Lab Checklist, 5.3b	Text – Chaps. XVII - XIX
Feb.	<ul style="list-style-type: none"> <li>• Mitosis and Asexual Reproduction</li> <li>• Meiosis and Sexual Reproduction</li> <li>• Animal Development</li> <li>• Human Reproduction</li> <li>• Sexual Reproduction in Plants</li> </ul>	<ul style="list-style-type: none"> <li>• Basic Vocabulary</li> <li>• Lab Techniques and Cooperative Learning</li> <li>• Reading and Problem Solving</li> <li>• Note Taking</li> <li>• Critical Thinking</li> <li>• Class Participation</li> <li>• Apply Scientific Concepts &amp; Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Types of Asexual Reproduction</li> <li>• Gamete Formation</li> <li>• Embryonic Development</li> <li>• Reproductive Systems</li> </ul>	<ul style="list-style-type: none"> <li>• Exams</li> <li>• Homework</li> <li>• Lab Reports</li> <li>• Quizzes</li> <li>• Class Participation</li> </ul>	2.1d, 2.1e, 4.1b, 4.1c, 4.1a, 4.1d, 4.1e, 4.1f, 4.1g, 4.1h	Text – Chaps. XX - XXIV
Mar.	<ul style="list-style-type: none"> <li>• Mendelian Genetics</li> <li>• Modern Genetics</li> <li>• Applied Genetics</li> </ul>	<ul style="list-style-type: none"> <li>• Basic Vocabulary</li> <li>• Lab Techniques and Cooperative Learning</li> <li>• Reading and Problem Solving</li> <li>• Note Taking</li> <li>• Critical Thinking</li> <li>• Class Participation</li> <li>• Apply Scientific Concepts &amp; Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Heredity</li> <li>• Fundamentals of Genetics</li> <li>• DNA &amp; Inheritance</li> <li>• Gene Expression</li> <li>• Mutations</li> <li>• Genetic Engineering</li> </ul>	<ul style="list-style-type: none"> <li>• Exams</li> <li>• Homework</li> <li>• Lab Reports</li> <li>• Quizzes</li> <li>• Class Participation</li> </ul>	2.1b, 2.1c, 2.1a, 2.1f, 2.1g, 2.1h, 2.1i, 2.1j, 2.2d, 3.1f, 5.2h, 2.2a, 2.2b, 2.2c, 2.2e, 3.1b, 3.1c, 3.1d, 4.1b, 5.2i	Text – Chaps. XXV– XXVII
Apr.	<ul style="list-style-type: none"> <li>• Evidence of Evolution</li> <li>• Modern Theory of Evolution</li> <li>• Monerans, Protists and Viruses</li> <li>• Fungi and Plants</li> </ul>	<ul style="list-style-type: none"> <li>• Basic Vocabulary</li> <li>• Lab Techniques and Cooperative Learning</li> <li>• Reading and Problem Solving</li> <li>• Note Taking</li> <li>• Critical Thinking</li> <li>• Class Participation</li> <li>• Apply Scientific Concepts &amp; Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Evidence of the Origins of Life</li> <li>• Adaptations</li> <li>• Natural Selection</li> <li>• Bacteria, Protozoans, &amp; Viruses</li> <li>• Fungi and Plant Diversity</li> </ul>	<ul style="list-style-type: none"> <li>• Exams</li> <li>• Homework</li> <li>• Lab Reports</li> <li>• Quizzes</li> <li>• Class Participation</li> </ul>	2.1a, 3.1a, 3.1e, 3.1j, 3.1l, 2.2a, 3.1e, 3.1f, 3.1g, 3.1h, 3.1i, 3.1k, 2.2c, 5.1b, 5.2b, 5.2e	Text – Chaps. XXVIII - XXXI

<b>May</b>	<ul style="list-style-type: none"> <li>• Behavior</li> <li>• Organization In The Biosphere</li> <li>• Biomes of the Earth</li> <li>• Human Ecology</li> </ul>	<ul style="list-style-type: none"> <li>• Basic Vocabulary</li> <li>• Lab Techniques and Cooperative Learning</li> <li>• Reading and Problem Solving</li> <li>• Note Taking</li> <li>• Critical Thinking</li> <li>• Class Participation</li> <li>• Apply Scientific Concepts &amp; Principles</li> </ul>	<ul style="list-style-type: none"> <li>• Innate, Learned &amp; Social Behavior</li> <li>• Cycles and Relationships</li> <li>• Land &amp; Water Biomes</li> <li>• Environmental Damage and Restoration</li> </ul>	<ul style="list-style-type: none"> <li>• Exams</li> <li>• Homework</li> <li>• Lab Reports</li> <li>• Quizzes</li> <li>• Class Participation</li> </ul>	3.1i, 1.1a, 1.1c, 1.1e, 1.1f, 6.1b, 6.1c, 6.1d, 6.1e, 6.1g, 6.2a, 6.2b, 6.3a, 6.3b, 6.3c, 7.1b, 7.2b, 1.1d, 5.2h, 6.1f, 7.1a, 7.1c, 7.2a, 7.2a, 7.2b, 7.2c	<b>Text – Chaps. XXXVI–XXXIX</b>
<b>June</b>	<ul style="list-style-type: none"> <li>• Regents Review and Practice Questions</li> </ul>	<ul style="list-style-type: none"> <li>• Basic Vocabulary</li> <li>• Lab Techniques and Cooperative Learning</li> <li>• Reading and Problem Solving</li> <li>• Note Taking</li> <li>• Critical Thinking</li> <li>• Class Participation</li> <li>• Apply Scientific Concepts &amp; Principles</li> </ul>	<ul style="list-style-type: none"> <li>• See Sept. – May Concepts</li> <li>• Laboratory Experiences</li> </ul>	<ul style="list-style-type: none"> <li>• Practice Exams</li> <li>• Daily Quizzes &amp; Homework</li> <li>• Class Participation</li> </ul>	Incorporation of all standards in review of the chapters	<b>Text – Chaps. I - XXXI &amp; XXXVI – XXXIX</b>  <b>Also Review Book</b>