

OLEAN HIGH SCHOOL

Course Name: Applied BioChemistry

Texts: Natural Resources, Animal Life Processes, Continuity of Life, Disease and Wellness, Plant Growth and Reproduction, Community of Life

Other Resources: Laboratory Manual, Review Book

Grades 9-12

Month	Topic Content	Skills	Concepts	Major Assessments	Learning Standards	Resource/Text Page
Sept.	Natural Resources	<ul style="list-style-type: none"> • Basic Vocabulary • Lab Techniques and Cooperative Learning • Reading and Problem Solving • Note Taking • Critical Thinking • Class Participation • Application of Scientific Concepts and Principles 	<ul style="list-style-type: none"> • Introduction to Natural Resources • Fossil Fuels • Air & Our Atmosphere • Water as a Natural Resource 	<ul style="list-style-type: none"> • Exams • Homework • Lab Reports • Quizzes • Class Participation 	<ul style="list-style-type: none"> • 1.1a-d; 1.2a-c; 1.3a, c, d • 1.1c-d; 1.2c; 1.3c-d; 4.7b-c • 1.1c-d; 1.2c; 1.3a, c-d; 4.7a-c • 1.1c-d; 1.2c; 1.3a, c, d; 4.7a-c 	<ul style="list-style-type: none"> • N.R. Subunit 1 • N.R. Subunit 2 • N.R. Subunit 3 • N.R. Subunit 4
Oct.	Natural Resources Animal Life Processes	<ul style="list-style-type: none"> • Basic Vocabulary • Lab Techniques and Cooperative Learning • Reading and Problem Solving • Note Taking • Critical Thinking • Class Participation • Application of Scientific Concepts and Principles 	<ul style="list-style-type: none"> • Soil as a Natural Resource • Living Resources • Keeping Our Bearings in the Environment • Maintaining Energy Levels and Body Weight 	<ul style="list-style-type: none"> • Exams • Homework • Lab Reports • Quizzes • Class Participation 	<ul style="list-style-type: none"> • 1.1c-d; 1.2c; 1.3d; 4.7a-c • 1.1c-d; 1.2c; 1.3c-d; 4.6a-b; 4.7a-c • 4.1b; 4.5a • 4.1b-c; 4.5a, c 	<ul style="list-style-type: none"> • N.R. Subunit 5 • N.R. Subunit 6 • A.L.P. Subunit 1 • A.L.P. Subunit 2
Nov.	Animal Life Processes	<ul style="list-style-type: none"> • Basic Vocabulary • Lab Techniques and Cooperative Learning • Reading and Problem Solving • Note Taking • Critical Thinking • Class Participation • Application of Scientific Concepts and Principles 	<ul style="list-style-type: none"> • Fluid Balance • Getting Rid of Wastes • Temperature Regulation 	<ul style="list-style-type: none"> • Exams • Homework • Lab Reports • Quizzes • Class Participation 	<ul style="list-style-type: none"> • 4.1b-c; 4.5a, c • 4.1b-c; 4.5a-c • 4.1b; 4.5a-c 	<ul style="list-style-type: none"> • A.L.P. Subunit 3 • A.L.P. Subunit 4 • A.L.P. Subunit 5
Dec.	Animal Life Processes Comparative Anatomy and Physiology	<ul style="list-style-type: none"> • Basic Vocabulary • Lab Techniques and Cooperative Learning • Reading and Problem Solving • Note Taking • Critical Thinking • Class Participation 	<ul style="list-style-type: none"> • Development and Growth 	<ul style="list-style-type: none"> • Exams • Homework • Lab Reports • Quizzes • Class Participation 	<ul style="list-style-type: none"> • 4.1b; 4.4a; 4.5a-c • Laboratory Checklist Appendix A 	<ul style="list-style-type: none"> • A.L.P. Subunit 6 • Dissection/Comparative Anatomy

		<ul style="list-style-type: none"> • Application of Scientific Concepts and Principles 				
Jan.	Continuity of Life	<ul style="list-style-type: none"> • Basic Vocabulary • Lab Techniques and Cooperative Learning • Reading and Problem Solving • Note Taking • Critical Thinking • Class Participation • Application of Scientific Concepts and Principles 	<ul style="list-style-type: none"> • Cell Growth and Reproduction (including Mitosis and Meiosis) • How Organisms Reproduce • Pregnancy and Birth 	<ul style="list-style-type: none"> • Exams • Homework • Lab Reports • Quizzes • Class Participation 	<ul style="list-style-type: none"> • 4.1b; 4.1c; 4.2a; 4.4a; 4.5a,c • 4.1b; 4.2a; 4.4a; 4.5a,c • 4.1b; 4.4a; 4.5a,c 	<ul style="list-style-type: none"> • C.L. Subunit 1 • C.L. Subunit 2 • C.L. Subunit 3
Feb.	Continuity of Life Disease and Wellness	<ul style="list-style-type: none"> • Basic Vocabulary • Lab Techniques and Cooperative Learning • Reading and Problem Solving • Note Taking • Critical Thinking • Class Participation • Application of Scientific Concepts and Principles 	<ul style="list-style-type: none"> • Genetic Inheritance in a Family • Genetic Inheritance in a Population • Genetic Engineering • Defense Against Invaders 	<ul style="list-style-type: none"> • Exams • Homework • Lab Reports • Quizzes • Class Participation 	<ul style="list-style-type: none"> • 4.1b; 4.2a; 4.4a; 4.5c; 4.6a, c; 4.7a-b • 4.1a; 4.2a; 4.3a; 4.6a-c; 4.7a-c • 4.2b; 4.7b, c • 4.1b-c; 4.4a; 4.5a-c; 4.7b-c 	<ul style="list-style-type: none"> • C. L. Subunit 4 • C. L. Subunit 5 • C. L. Subunit 6 • D.W. Subunit 2
Mar.	Disease and Wellness Plant Growth and Reproduction	<ul style="list-style-type: none"> • Basic Vocabulary • Lab Techniques and Cooperative Learning • Reading and Problem Solving • Note Taking • Critical Thinking • Class Participation • Application of Scientific Concepts and Principles 	<ul style="list-style-type: none"> • Major Health Threats • Staying Healthy • Introduction to Plants • Plant Reproduction 	<ul style="list-style-type: none"> • Exams • Homework • Lab Reports • Quizzes • Class Participation 	<ul style="list-style-type: none"> • 4.1a; 4.5a-c; 4.6a, c; 4.7b • 4.1b; 4.5a, c • 4.1c; 4.4a; 4.5a-c • 4.2a, b; 4.4a; 4.7a-c 	<ul style="list-style-type: none"> • D. W. Subunit 3 • D. W. Subunit 5 • P.G.R. Subunit 1 • P.G.R. Subunit 3
Apr.	Community of Life	<ul style="list-style-type: none"> • Basic Vocabulary • Lab Techniques and Cooperative Learning • Reading and Problem Solving • Note Taking • Critical Thinking • Class Participation • Application of Scientific Concepts and Principles 	<ul style="list-style-type: none"> • Biodiversity • Forest Ecosystems • Saltwater Ecosystems • Changes in Ecosystems 	<ul style="list-style-type: none"> • Exams • Homework • Lab Reports • Quizzes • Class Participation 	<ul style="list-style-type: none"> • 4.1a; 4.3a; 4.6a-c; 4.7a-c • 4.1a; 4.3a; 4.6a-c; 4.7a-c • 4.1a; 4.3a; 4.6a-c; 4.7a-c • 4.1a; 4.3a; 4.6a-c; 4.7a-c 	<ul style="list-style-type: none"> • Comm. Subunit 1 • “ “ “ “ • Comm. Subunit 2 • Comm. Subunit 3
May	Community of Life Regents Review &	<ul style="list-style-type: none"> • Basic Vocabulary • Lab Techniques and Cooperative Learning • Reading and Problem Solving • Note Taking • Critical Thinking • Class Participation 	<ul style="list-style-type: none"> • Urban Ecosystems • Human Population • Global Views <p>For Regents Review & Practice Questions, see Sept. – May concepts</p>	<ul style="list-style-type: none"> • Exams • Homework • Lab Reports • Quizzes • Class Participation 	<ul style="list-style-type: none"> • 1.1a-d; 1.2a, c; 1.3a, c, d; 4.1a; 4.6a-c; 4.7a-c • 1.1a-d; 1.2a, c; 1.3a, c, d; 4.1a; 4.6a-c; 4.7a-c • 1.1a, c, d; 1.2a, c; 4.1a; 4.6a-c; 4.7b, c 	<ul style="list-style-type: none"> • Comm. Subunit 4 • “ “ “ “ • Comm. Subunit 5

	Practice Questions	<ul style="list-style-type: none"> • Application of Scientific Concepts and Principles 				
June	Regents Review & Practice Questions	<ul style="list-style-type: none"> • Basic Vocabulary • Lab Techniques and Cooperative Learning • Reading and Problem Solving • Note Taking • Critical Thinking • Class Participation • Application of Scientific Concepts and Principles 	For Regents Review & Practice Questions, see Sept. – May concepts	<ul style="list-style-type: none"> • Exams • Homework • Lab Reports • Quizzes • Class Participation 	Incorporation of all standards in review of the chapters	All texts mentioned above PLUS the L.E. Review Book