Life Science Essentials

Course Overview and Syllabus



Prerequisite courses: none Grade level: 9-12

Course Description

Students will learn fundamental concepts of Life Science and develop strategies in general scientific skills and practices. Topics will include cell biology, genetics, classification of living things, ecology, and human biology.

This course is part of the Exceptional Students Course Suite, designed for high school students working three or more grade levels behind. The Exceptional Students courses are ideal for students whose IEPs allow them to earn credit for below-grade-level coursework.

Course Objectives

Students will meet the following goals in this course.

- Identify the levels of organization in animals and plants.
- Explain the steps in the process of cellular respiration.
- Differentiate between genotype and phenotype.
- Describe factors that contribute to the extinction of a species.
- Compare and contrast eubacteria and archaebacteria.
- Compare the characteristics of nonvascular and vascular plants.
- Examine the movement of energy through an ecosystem in food chains and food webs.
- Examine how food is physically and chemically broken down by the digestive system.

Student Expectations

This course requires the same level of commitment from students as a traditional classroom course. Students are expected to spend approximately 5–7 hours per week online on:

- interactive lessons, which include a mixture of instructional videos and tasks.
- assignments, in which they apply and extend learning in each lesson.
- assessments, including quizzes, tests, and cumulative exams.

Communication

Teachers will communicate with students regularly through discussions, emails, chats, and system announcements. Students will also communicate with classmates, either via online tools or face to face, to collaborate, ask and answer questions in peer groups, and develop speaking and listening skills.

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Grading Policy

Students will be graded on work completed online and work submitted electronically to the teacher. The weighting for each category of graded activity is listed below.

Grading Category	Weight
Assignments	20%
Lesson quizzes	30%
Unit tests	30%
Cumulative exams	20%

Scope and Sequence

When students log on to Imagine Edgenuity, they can view the entire course map—an interactive scope and sequence of all topics under study. The units of study are listed below

Course Units
Unit 1: Cell Structure
Unit 2: Genetics and Evolution
Unit 3: Classification of Living Things
Unit 4: Ecology
Unit 5: Human Biology