

INTRODUCTORY OCEANOGRAPHY

Course Description:

This introductory oceanography course explores the vast and dynamic systems of Earth's oceans. Students will investigate ocean basin structure, water properties, waves and tides, currents, marine ecosystems, and the interconnections between oceans and human society. Through hands-on activities, observations, and model-building, students will develop an understanding of how oceanographic processes shape life on Earth and how human activities impact marine environments.

Course Overview:

Unit One: Introduction to Oceanography and Earth's Water Systems

Unit Two: Ocean Basin Structure and Plate Tectonics

Unit Three: Properties of Ocean Water

Unit Four: Ocean Waves and Tides

Unit Five: Ocean Currents and Heat Distribution

Unit Six: Marine Ecosystems, Ocean Zones, Life, and Biodiversity

Student Notebook Requirement:

Students are required to keep a science notebook throughout the entire fifteen-week course. The notebook is a central learning tool used in every class session. Notebook entries should include observations and data from activities, sketches and labeled diagrams, written reflections, responses to quick checks for understanding, and notes taken during direct instruction. Notebooks will be reviewed periodically, and a final reflection entry will be completed in the last class session.

Grading Scale:

A: 90 – 100

B: 80 – 89

C: 70 – 79

D: 60 – 69

F: 0 – 59

Grade Breakdown:

Activities and Investigations: 40%

Notebook Entries and Reflections: 25%

Quick Checks for Understanding: 20%

Capstone Conservation Action Plan and Presentation: 15%