Content: Elective	Grade or Course: Oceanology (11-	Date Developed:
	12)	

Overview: Oceanology is an elective course with a "hands on" oriented approach to learning about living organisms native to Maine's Gulf Coast. It is designed to give students an introductory level look at Maine's "Rocky Coast" and it's associated study. Students will engage in a variety of labs experiences and activities related to: The Gulf of Maine and it's geology, Marine Habitats, , Whales, Lobsters, Algae, Mollusks and Plankton. Students will also have an opportunity to consume some of the fine offerings that the Gulf of Maine provides, if they so choose. A large part of this course is the opportunity to go on organized field trips to local tide-pools to experience the ocean in a different setting and collect specimens for future projects and study. This is a .5 credit class in which the majority of class work is done during class time, however, there will be times when it will be appropriate to complete work at home.

# **Essential Questions:**

at is Oceanology and how is the Ocean studied?
w does the Gulf of Maine affect Life in Maine?
at are Phytoplankton and Zooplankton?
at contributes to the Density of the gulf of Maine?
at are the Geographics and special contributing factors to the Gulf of Maine?
w do Stratified layers, Density and ocean depth contribute to life in the Gulf of Maine?
at are the "Marine Habitats" and what role do they play in Maine's economy?
at role does the Gulf of Maine play in "your" life

### s with proficiency:

- P4: Analyzing & Interpreting Data
- P5: Using Math & Computational Thinking

#### Standards:

- ~ P1: Asking Questions and Defining Problems
- ~ P2: Developing and Using Models
- ~ P3: Planning and Carrying out Investigations
- ~ P8 Obtaining, Evaluating and communicating

### **Units:**

Unit 1 Gulf of Maine

**Unit 2 Marine Habitats** 

**Unit 3 Whales** 

Unit 4 Algae

Unit 5 Lobster

Unit 6 Plankton

Unit 7 Mollusks

## **EO** Assessments:

- Gulf of Maine Project
- Water Density & Stratified Layer
- Rocky Shore Zonation & Illustration
- Whale Buletin
- Lobster Dissection
- Algae "practical"
- Field Guides