

Course Name: 2072 Marine Science
Teacher Name: Meghann Murray

Level: CCP

Points: 5

Course Description: This elective explores the biological, chemical, ecological, geological, and physical aspects of the marine environment. Special emphasis will be placed on the local ecology, the problems that need to be addressed to keep our oceans clean and productive, and the technological processes involved in the marine environment. Laboratory, demonstrations and/or hands-on activities will be conducted once in every schedule cycle.

Texts/Instructional Materials:

Course textbook – Castro, Peter, and Michael E. Huber. *Marine Biology*. New York, NY: McGraw-Hill Education, 2016. Print.

Course website - msmurraybiology.weebly.com.

Required materials -

- 3-Ring Binder with sections (ex. warm-ups; notes; class-work & labs; homework; and tests & quizzes)
- Lined paper
- Pencil or Pen

Topics of Study:

Principles of Marine Science

- The Science of Marine Biology
 - The Scientific Method
- The Sea Floor
 - The Water Planet
 - Ocean Structure and Basins
 - Provinces of the Ocean

Chemical and Physical Feature of Seawater and the World Ocean

- The Waters of the Ocean
 - Properties of Water
- Ocean Circulation
 - Currents, Waves & Tides

An Introduction to Marine Ecology

- Organization of Communities
- Energy Flow
- Major Marine Environments (Intertidal, Estuaries, Coral Reefs, Ocean surface, Deep ocean)

Organisms of the Sea

- Microbial Organisms
 - Bacteria
 - Diatoms & dinoflagellates
- Multicellular Producers: Seaweeds & Plants
 - Seaweeds
 - Flowering plants
- Marine Invertebrates
 - Sponges
 - Cnidarians (jellyfish, sea anemones, corals, hydroids)
 - Mollusks (bivalves, univalves, cephalopods)
 - Crustaceans (lobsters, crabs, shrimp)
 - Echinoderms (sea stars, sea urchins, sand dollars)
- Marine Vertebrates
 - Marine fishes (jawless, cartilaginous & bony fishes)
 - Marine reptiles, birds & mammals (reptiles, seabirds, marine mammals)

Assignments:

There will be daily classwork assignments and homework will be assigned both from the textbook and in class multiple times a week. Tests will be given at the end of each unit and at least two quizzes will be given each term.

Grading Policy:

Grades will be based on a variety of assessment methods. There will be a midterm exam at the end of the 2nd Quarter and a final exam at the end of the 4th Quarter; each of these will comprise 20% of the grade for those quarters.

Grades will be broken down as follows:

<u>Assessment</u>	<u>1st/3rd Quarter</u>	<u>2nd/4th Quarter</u>
Classwork & Labs	30%	24%
Homework	25%	20%
Tests & Quizzes	35%	28%
Class Participation	10%	8%
Midterm/Final Exam	0%	20%

Academic Accountability:

Students will complete the assigned work on time, or with knowledge of the following academic work policies:

Homework Policy:

In order to receive full credit, homework assignments must be turned in at the beginning of class on the day they are due. Homework is graded on a, check plus (√+), check * (√*), check (√), check minus (√-), late (L), very late (VL) and zero (0) scale. Homework grades will be based on correctness as well as completion. Please see homework grading sheet for a more detailed explanation. Homework will not be accepted once a test is given on the subject.

Make-Up Work:

Students must speak with the teacher on the first day back after an absence to discuss make-up work and its due date. Students who are absent on the day of a test/quiz/project should be prepared to take the test/turn in the project on the day of their return. Quizzes and tests must be made up on students’ own time (i.e. before/after school), **not** during class. Generally, students will have 3 days to make up work, though this will be determined on a case-by-case basis.

Late Classwork Policy:

In order to receive full credit, work must be turned in by the **end of the period** (unless otherwise discussed). As with homework assignments, for each day classwork is late, the grade will decrease by one increment. Classwork will not be accepted once a test is given on the subject.

Cell Phone Policy: All cellular devices must be placed in the provided cell phone pockets for the entire class period. Pockets will be assigned to individual students. Students may retrieve their devices at the end of each period.

Students are expected to check ASPEN on a regular basis - grades will be updated frequently.

Please complete the portion below. DO NOT REMOVE THIS PORTION OF THE SYLLABUS – KEEP IT AT THE FRONT OF YOUR BINDER!

I, parent/guardian of _____, understand the content and expectations associated with the course described in this course contract/syllabus.

Name/Signature _____ Date _____

I, the student enrolled in the course described in this course contract/syllabus, understand what I can expect and what is expected of me, in this course.

Name/Signature _____ Date _____