**Marine Biology Lecture Presentation**

***Assignment:*** Your assignment, which can be done with one partner or two partners, is to prepare a multimedia presentation (PowerPoint, Keynote, etc.) on one marine species or issue affecting marine organisms.

If you choose to present on a marine species, then your report must include all of the following:

1. Name: Common name, scientific name, and scientific classification (taxonomy)
2. General species description: size, weight, color, etc. You should include information on how to distinguish your species from other similar ones if applicable.
3. Distribution and habitat: Where is your species found in the world? What sort of marine habitat does your species prefer or frequent? What zone of the ocean does it live in?
4. Population: What is your species estimated population size and what is the population trend (increasing or decreasing?) Is your species threatened or endangered? Depending on your species there may not be much information on population size and trends.
5. Adaptations: How is your species adapted to its environment? Discuss how your species has evolved to succeed in its environment and identify any special adaptations that help its survival.
6. Diet and Ecological Relationships: What does your species eat? Are there important ecological relationships between your species and another species (e.g., competition, mutualisms, etc.)? Does this organism play important roles in the ecosystem?
7. Relationship with humans: What is the relationship of your species to humans? Do we hunt or fish your species? Is it being threatened by human activity? Does it attack humans?
8. List of references: All web sites and other sources used in your research.

If you choose to present on an issue affecting marine organisms, then your presentation should include all of the following:

1. General description of the issue: What is the problem? Provide any statistics about the problem.
2. Location where this problem is occurring: What oceans or coastal regions are experiencing this problem? What marine habitats are most affected by the problem?
3. Cause of the issue: What factors are causing this issue? Be specific and try to get to the root causes of the issue. What specific human behaviors are responsible for the problem?
4. Specific species or ecosystems being affected by the issue: How is this issue affecting marine species specifically and how are the interactions between species within an ecosystem affected by the issue?
5. Impacts to humans: How are the problems associated with this issue affecting humans today? How is this issue going to affect humans in the next 20 or 50 years?
6. What are the solutions to fix the problem: What are some of the ways the public can help resolve the issue? Are there any laws or regulations in place to help reduce the impacts caused by the problem?
7. List of references: All web sites and other sources used in your research.

***Grading:***

This research project is worth 30 points. You will be assessed on the quality of the information presented, the organization of your presentation, and the clarity and delivery of your presentation (speaking clearly, not reading off slides, appropriate length of time, etc.). See the posted rubric for grading specifics.

***Species Suggestions:***

You may pick any individual species of marine nekton that no other group has chosen. The following is a list of suggestions but is by no means complete.

Great white shark

Tiger shark

Whale shark

Bull shark

Hammerhead shark

Goblin shark

Blunt-nose six-gill shark

Mako shark

Basking shark

Salmon shark

Megamouth shark

Thresher shark

Stingray (any species)

Manta ray

Giant squid

Colossal squid

Humboldt squid

Bluefin tuna

Swordfish

Sailfish

Blue marlin

Mahi Mahi

Mola mola

Flying fish (any species)

Moray eel

White Sturgeon

Bowhead whale

Right whale

Blue whale

Minke whale

Sei whale

Gray Whale

Humpback whale

Killer whale

Narwhal

Beluga whale

Dolphin (any species)

Porpoise (any species)

Seal (any species)

Sea lion (any species)

Sea otter

Walrus

Elephant seal

Sea snake (any species)

Saltwater crocodile

Marine iguana

Sea turtle (any species)

Penguin (any species)

Albatross (any species)

Puffin (any species)

Tern (any species)

Steller’s sea eagle

Brown Pelican

Polar bear

**Suggestions for marine issues:**

Marine animals eating plastics

Giant ocean garbage patch

Dead zones

Shark finning

Over fishing

Ocean acidification

Shrinking arctic ice sheets

Mercury pollution

Algal blooms and domoic acid Invasive species

Whaling

Tourism

Offshore drilling

Aquaculture

Abandoned fishing gear

***Where to start your research:***

* Your textbook
* Ichthyology textbooks (for fish) or marine mammal textbooks (for mammals); ask your professor if he has any books to review during office hours that might have information on your species.
* For fish: [www.fishbase.org](http://www.fishbase.org)
* For birds: [www.allaboutbirds.org](http://www.allaboutbirds.org), <http://www.audubon.org>
* For mammals: <http://www.nmfs.noaa.gov>
* Any website that appears on web search results that ends in “.edu” or “.gov”—these tend to have reliable information.
* The webpage marinebio.org has information on many marine species.

***Presentation:***

* PowerPoint presentation file is due at the start of class on your presentation date.
* You must bring a paper printout of your slides (4 slides per page, two-sided printing is ok to save paper).
* Organize your findings into a presentation using the sections in the assignment above.
* Your presentation should be no more than 10 minutes in length.
* All information from sources should be properly cited using the provided guidelines. **Avoid direct quotes wherever possible**. Do NOT use any presentations you find online; this will be considered plagiarism and will be reported according to Mt. SAC’s cheating policy.

***Reference Guidelines:***

*Type references in the following form* (last slide of your presentation):

Book: Author(s). Year. Title. Edition. Location: Publisher.

Bailey, N. J. 1981. Statistical Methods in Biology. 2nd edn. London: Unibooks.

Article or chapter within a book: Author(s). Year. Article title. In: Book title (Editors). Pages. Location: Publisher.

Emlen, S. T. 1978. The evolution of cooperative behaviour in birds. In: Behavioural Ecology

(Ed. by J. R. Krebs & N. B. Davies), pp. 245-281. Oxford: Blackswell Scientific.

Journal article: Author(s). Year. Title. Journal, Volume. Pages.

Robinson, M. H. & Robinson. B. 1970. The stabilimentum of the orb web spider, *Argiope*

*argentata:* an improbable defense against predators. Canadian Entomologist, 102, 641-645.

Web Site: Author(s) (or website name if no author), Year. Title Address (be sure to remove hyperlink formatting).

***Powerpoint Formatting:***

1. Text

* Make all text as large as possible; > 24 font, using same font style throughout
* Exceptions: (however, try to use font no less than 20 if possible) references or subtitles on graphs or pictures
* Font: Arial or Times Roman
* Colors: depends upon background choices; see ideas below
* Use the ***minimum amount of text possible*** on each slide. You shouldn’t be reading everything, just using the bullet points as a reminder of what to say

1. Backgrounds

* Use a simple, pleasing background
* Examples: Dark blue grading to light blue; white or black text
* Avoid a background with many lines, many colors, or many shades of one color
* DO NOT USE ANIMATED BACKGROUNDS; they are distracting to audience

1. Graphs, diagrams, pictures, etc.
   * + Make these as large as possible
     + Make any text as large as possible.
     + Don't exceed four plots or pictures per slide
     + Do include at least one photo, diagram, map, etc. on every slide