Advice on choosing your term paper topic

The paper is 20% of the grade. It should be 2200-2500 words minimum 2 figures, 4 references.

The topic has to be interdisciplinary and on some aspect of a topic covered in the course. Interdisciplinary means: it addresses 2 of the basic disciplines. These are:
- Physical, chemical biological geological aspects of oceanography.
- Any aspect of hydrothermal vents and their fauna are not an acceptable topic.

**Term paper topic IDEAS**

**Hydrothermal vents topics are not acceptable.**

**Pollution**
- Plastics in the ocean
- Nutrient pollution effects on estuarine ecosystems (Eutrophication)
- Oil spills: effect of currents and location on biological effect and remediation e.g. The Gulf Oil spill vs Exxon Valdez
- Anthropogenic carbon dioxide emissions and its effects (temperature, ocean acidification, circulation) on marine ecosystems
- Ocean acidification effects on calcifying organisms
- Global warming: temperature effects on marine ecosystems
- Harmful algal blooms: currents/ toxicity and biology

**The effects of natural cycles on fisheries**
- e.g. El Niño effects on productivity (primary and secondary) or carbon cycling

**Antarctic Krill:**
- survival skills in an extreme environment
- changes in ecosystem structure with climate change

**Ocean ecosystem structures – stresses and changes with climate change**

**Estuaries, metals, and pollution:** it’s not just a matter of dilution

**Coastal dead zones – nutrients or geochemical and circulation interactions.**

**Iron fertilization and the biological pump effect on CO₂ sequestration**

**CO₂ sequestration in the ocean biology versus chemistry and the effect of circulation.**

**El Niño effects on productivity (primary and secondary) or carbon cycling**

**Ocean circulation – climate interactions.**

**A comment on climate change papers in general:** There are multiple ways climate change can affect marine systems the basic ones we cover in class are consequences due to warming (sea level rise, thermal stress) and the chemical consequences due to CO₂. These each have effects on ecosystems and currents and feedbacks. It is important to keep these fundamentals distinct when researching and writing up an interdisciplinary topic.