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**Research Methods in Marine Biology A (2 points, 2024)**

**Semester B**

**Course Schedule: Thursday 12:00-16:00, full day of field trip**

Research in Marine Biology A will aim to familiarize students with some fundamentals of climate change and its effects on marine organisms. In addition, in this part will also be used to identify important scientific questions and objectives and to design the independent research projects for Research Methods in Marine Biology B. Students will be introduced to diverse methodology that will be used in this course. At the end of the semester, we will conduct a field survey. The students will be expected to design their projects, present it, and write a proposal.

**Instructors:**

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**Teaching Assistants & Office Hours:**

TBA

**Course Type: lectures, workshops and field work**

**Course Level:** M.Sc.

**Pre-Requisites:**

This course should be taken at the same year as Research methods in Marine Biology B.

**Course Overview:**

In this course, we teach advanced research methods in marine biology and oceanography by exposing the students to critical topics related to climate change. The students will experience defining scientific questions, setting goals, strategic planning, experimental design, and presenting a research

proposal. They will learn about field sampling methods and will experience field surveys during the field trip. At the end of the course the student will submit a research proposal

### **Topics:**

1. Climate change and ecosystems
2. Strategy and planning
3. Marine Survey techniques.
4. Sample collection on site.
5. Experimental design
6. How to write a research proposal
7. Field trip

### **At the end of the course students will be able to: [Learning Outcomes]**

1. Define a focused research question and hypothesis.
2. Design a research approach to test the hypothesis.
3. Plan and prepare a marine survey.

### **Requirements**

100% Attendance

### **Grading:**

30% Class assignments.

30% Research proposal.

20% Field work.

20% attendance and participation.

**Website:** [Moodle](#)