

**American University of Beirut  
Faculty of Arts & Sciences  
Department of Biology**

**Course number:** Biol. 266 L  
**Course title:** Oceanography Lab.  
**Meeting time & location:** Tuesday 11:00 – 2:00  
**Credits:** 1 credit (3 hrs weekly)

**Instructor:**

Name: Imad Saoud, PhD  
Office: Biology bldg, room 315  
Tel: 3913  
Email: [is08@aub.edu.lb](mailto:is08@aub.edu.lb)

**Book:** Handouts with experiments will be distributed for each session.

**Pre- or co-requisite:** BIOL 266 (Oceanography)

**Course description:**

This course introduces students to the basic concepts of oceanographic science applications. The course will focus on the chemical, physical and geological processes **that affect life in the oceans and on planet earth** in general. Methods of research used by oceanographers past and present will be introduced and demonstrated. **The lab is writing intensive and credit will mostly be given to written work.**

**Learning outcomes:**

By the end of the course the student should be able to

- Demonstrate knowledge of oceanographic vocabulary.
- Demonstrate familiarity w/ ocean science equipment and applications.
- Have an understanding of processes that affect beaches and seas.
- Demonstrate a scientific attitude and aptitude
- Learn how to write scientific manuscripts.

**Grading:**

Lab reports	20%	
Proposal	20%	
Abstract	20%	
Research paper	30%	
Attendance	10%	Includes drop quizzes

**N.B. Students are expected to be familiar and adhere to the student code of conduct (<http://pnp.aub.edu.lb/general/conductcode/index.html>). Cheating will be seriously penalized**

**Course content.**

Topic
1. Introduction of lab and discussion of writing material and methods.
2. Understanding oceanographic measurements and graphs. Log, semi-log, etc.
3. Bathymetric charts. Drawing contours, understanding gradients and ocean bottom shapes.
4. Use various methods (chemical and electronic) to measure salinity, temperature, turbidity, DO.
5. Alkalinity and Hardness, Ammonia, Nitrite, Phosphorus
6. Research project (to be decided).
7. Field trip. To be discussed.

After the start of the research project, students will be given access to the lab and required equipment (under supervision of lab instructor) to perform independent work and the rest of the semester will be used for writing a research paper. The paper will be given in 1 month after the research project and will be returned to students after primary evaluation. The final version will be graded.