
THE OCEAN ENVIRONMENT in Fall 2020 (SC1070)

Course Code	SC1070	Professor(s)	Manuel Caballer Gutierrez
Prerequisites	None	Office Number	C202
Class Schedule	F: 16:20-17:55 in PL-3 T: 10:50-12:25 in PL-3	Office Hours	By appointment
Credits	4	Email	mcaballergutierrez@au p.edu
Semester	Fall 2020	Office Tel. Ext.	614

Course Description

This course will take you on a vivid exploration of the oceanic environment, from the tropics to the poles, introducing physical, geological, chemical, and biological oceanography. We will visit the Marianas trench and mid-ocean ridges, discuss about global warming and about the growing plastics problem in mid oceanic gyres, observe the effects of acidification in marine life, and study wave dynamics. We will explain oceanography's most important concepts and debunk its widely (and wildly) held misconceptions, presented in movies such as "Deep impact", "Day after tomorrow" or "The Meg". You will understand the complexities and nuances involved in state-of-the-art oceanic research. You will explore topics like Hurricanes; El Niño; tsunamis; the oceans role in climate; climate change; modern scientific exploration; biodiversity, red tides. We will also examine the ocean's role as an energy, food and freshwater resource for humans and its tremendous vulnerability to abuse by them. The future success of humanity as a species depends on its ability to manage marine resources efficiently, mitigate associated risks and adapt to environmental changes.

This course emphasizes science literacy and critical thinking through the study of the ocean environment. Students will be guided by a text book, but they will also engage in lessons that involve research or more in-depth study on the topic.

Course Learning Outcomes

Students will demonstrate knowledge about the basics of ocean fundamentals and the major ocean concerns and potential mitigation strategies of their generation.

Students will demonstrate the ability to interpret scientific data related to oceanography from a

variety of sources.

Students will apply the scientific method to answer questions/solve problems related to oceanography.

Students will demonstrate written and oral presentation skills when communicating scientific knowledge related to the ocean.

General Education

GLACC:

This course can be used to fulfill the *Experimental Reasoning Course with Lab (coded CCS)* requirement and as such has the following learning outcomes (Learning Outcomes for GLACC components are defined on the [AUP GLACC Website](#)):

Course Outline

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- The schedule is subject to change and will be revisited as the course progresses.
 - There might be other members of the Department of Computer Science Math and Environmental Science invited as guests' professors.
 - **Saturday visit to the Paris Aquarium is scheduled in the syllabus, make sure you are available in the indicated date, labs are mandatory. This visit will count as a double lab for attendance and evaluation.**

Textbooks

Title	Author	Publisher	ISBN	Required
Essentials of Oceanography, 8th Edition	Tom S. Garrison & Robert Ellis	Cengage Learning (EMEA) Ltd - Not available at Bookstore	9781337098649, 1337098647	Yes

Attendance Policy

[Specific Attendance policy:](#)

Any student that fails 4 labs or more fails the course (for whatever reason).

Quizzes cannot be retaken for any reason. If you don't do the quiz you have a 0 (1 quiz every week). But the lowest grade won't count towards your final average.

[Attendance policy:](#)

Students studying at The American University of Paris are expected to attend ALL scheduled classes, and in case of absence, should contact their professors to explain the situation. It is the student's responsibility to be aware of any specific attendance policy that a faculty member

might have set in the course syllabus. The French Department, for example, has its own attendance policy, and students are responsible for compliance. Academic Affairs will excuse an absence for students' participation in study trips related to their courses.

Covid-19 temporary amendments:

Students studying at The American University of Paris are STILL EXPECTED TO ATTEND ALL scheduled classes. Due to the Covid-19 pandemic, students will have the option of attending classes remotely when special circumstances apply. For example, when students are placed under quarantine by the French authorities or by their doctor, or when students present symptoms of Covid-19 and are directed, by their doctor or the AUP Health Office, to remain home. It is still the student's responsibility to be aware of any specific attendance policy that their professor might have set in the course syllabus. In particular, Students attending remotely from distant Time Zones should check with their professors about the specific attendance policy for remote learners.

Attendance at all exams is mandatory.

In all cases of missed course meetings, the responsibility for communication with the professor, and for arranging to make up missed work, rests solely with the student.

Whether an absence is excused or not is ALWAYS up to the discretion of the professor or the department. Unexcused absences can result in a low or failing participation grade. In the case of excessive absences, it is up to the professor or the department to decide if the student will receive an "F" for the course. An instructor may also recommend that a student withdraw if absences have made it impossible to continue in the course at a satisfactory level.

Students must be mindful of this policy when making their travel arrangements, and *especially during the Drop/Add and Exam Periods*.

ENGLISH LANGUAGE PROFICIENCY STATEMENT: As an Anglophone university, The American University of Paris is strongly committed to effective English language mastery at the undergraduate level. Most courses require scholarly research and formal written and oral presentations in English, and AUP students are expected to strive to achieve excellence in these domains as part of their course work. To that end, professors include English proficiency among the criteria in student evaluation, often referring students to the university Writing Lab where they may obtain help on specific academic assignments. Proficiency in English is monitored at various points throughout the student's academic career, most notably during the admissions and advising processes, while the student is completing general education requirements, and during the accomplishment of degree

program courses and senior theses.

Grading Policy

Item	Num.	Duration	Evaluation	Percentage weight on final grade
Class quizzes	9	20 minutes	Percentage of right answers, average of top 7 scores	20%
Midterm	1	1 hour 35 minutes	Percentage of right answers + essay	25%
Lab reports	11	N/A	Average of top 9 scores	20%
Final written	1	3 hours	Percentage of right answers + essay	30%
Presentation	1	10 minutes	Theme chosen and performance	5 %

- At the end of each class the students will have the opportunity to write the questions they want to have in the quizzes. These questions will need to cover the most of the lecture. All students will have the opportunity to send questions to the professor by mail until the end of the day.
- During the course, in class time, every student must show a Power Point presentation (10 minutes), about any theme related to oceanography of his/her interest. Any theme is acceptable if the student is able to find a link to oceanography.
- Presentations for the synchronous remote students will happen during class time. Asynchronous remote students will present during one of the afternoon classes on Fridays.
- After some lectures, the professor will raise a question or provide a link to a relevant and current news related to the past or next lecture. During the next class there will be a brief discussion about this new or about the question raised, and the professor will give 1 extra point in the next quiz to the students depending on their contribution to the discussion (i.e.: Yes, no, I agree, etc. are not contributions leading to get extra points). Students bringing additional related news and showing knowledge on the theme will be rewarded.

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- Students not enrolled in the labs will be evaluated based in a proportional redistribution of the other items.

Other
