



Directions for Undergraduate Program Director Reports:

1. Talk to students in your major, ask around if there are any current academic issues.
(ex: class conflicts within the major, issues with professors, etc)
2. Look at Degree Navigator, write down the course requirements
3. Formulate a list of things you would like to know about the program (corporate connections with the university, current research projects, opportunities for students to get involved, etc)
4. Email Undergraduate Program Director and Arrange Appointment
5. Fill out Undergraduate Report Sheet
6. email to vicepresident@sgc.rutgers.edu and complete by December 16th

Name: Chloe BaskinMajor: Marine Science - Physical OceanographyDate: December 7th 2016Semester: Fall 2016Undergraduate Program Director: Dr. Gary Taghon

UPD Contact Information:

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I. Major Options - What options are offered within the major? How do they differ?

The Marine Sciences department offers 5 different options: Physical Oceanography, Marine Biology/Biological Oceanography, Chemical Oceanography, Marine Geology, and Directed Marine Studies. While all of these options are different, marine science/oceanography is inherently disciplinary so many of the options have classes that overlap.

-Physical Oceanography is the study of physics of the ocean. So waves, circulation, tides. This is very similar to the meteorology major that is offered to SEBS students.

-Heavily math, physics, and engineering based.

-Marine Biology/Biological oceanography is the study of the organisms/biological processes within the ocean.

-Marine Chemistry is the study of the chemical processes that affect the ocean. Things like ocean acidification,

-Marine Geology is the study of the geological processes that occur within the ocean.

- Marine Biology, Geology, and Chemistry are heavy in chemistry and biological coursework, geology has an added geological aspect either with a paleontology direction or plain geology. .

These four are intended to give a degree that can lead to anything (i.e Graduate School, Research, Teaching etc.)

-Directed Marine Studies is close to the Marine Biology option but has a requirement of a certificate or minor. It is intended not for research purposes but for outreach and education.

II. Total number of students within the major

~85 people in total

III. Goals within the major - What are expectations of students post-graduation?

There is no "expectation" of the students. However, the UPD would really like to find a way to keep in touch with students post graduation. He suggested to create a Linked-In and join the marine science group. He would also like to get a permanent email address where job opportunities, internships, etc. can be forwarded to.

IV. Major Courses - What is the goal of each course? What should students be learning?

The “Major Courses” depend on the option you are taking but the main courses seem to be OMDA, Dynamics of Marine Ecosystems, Chemical Oceanography, Physical Oceanography, and Ocean Ecology.

OMDA - Ocean Methods and Data Analysis teaches hands on research experience. It teaches students how to use popular marine science instruments like ADCPs and CTDs and the backgrounds of these instruments. Team building is a giant part of this course.

Dynamic of Marine Ecosystems - The “starter” marine science course. It gives general knowledge on all aspects of the ocean. There are physical, chemical, and biological portions of the class.

Chemical Oceanography, Physical Oceanography, and Ocean Ecology - Each of these go into greater depth than dynamics. Ocean Ecology = Biological Oceanography.

V. Concerns/Student issues with classes? How to resolve, suggestions?

UPD states that there is no real issues. Occasionally (1 or 2) students will have an issue with grades and there will be a formal dispute but besides that there is no real concerns or issues.

To combat future issues they have created some new classes that add diversity and easier scheduling for the students. I will talk about them in section IX.

VI. Things going on within the major (Research, Visitors, Talks, Seminars within the major)

There are always talks and seminars. These are typically announced via flyer in the DMCS building or through the mass emails they send to all marine science majors and faculty. They are also announced on the marine.rutgers.edu website.

VII. Research Opportunities

There are always research opportunities around DMCS. If students are interested they should contact someone either a person they know at DMCS or the person they would like to work with via email. Sometimes, even if they do not have room for them in their lab, they will send out a mass email asking if anyone needs extra help. REACH OUT.

Also the Rutgers oceanography club page frequently has opportunities on it!

VIII. Job Outlook, suggestions for students in this major (ex: organizations to join, news to pay attention to)

Join any professional organization that relates to your major or what you are potentially interested in for a career. The student membership rates are frequently reasonable prices and it offers a great way to network for jobs and potential graduate school advisors.

JOIN LINKED IN!!! This is so that your undergraduate professors and advisors can forward or recommend you jobs/internships/openings of any sort that they feel would be of interest to you.

Dr. Taghon will be putting a link to a great website with job listings on the DMCS website.

IX. Changes within the major in the upcoming year?

They have created 2 new courses: a chemical and biological version of OMDA and Biological Oceanography in the Water Column.

The chemical and biological version of OMDA gives hands on experience for procedures and research in the chemical and biological oceanography fields.

Bio ocean in the water column was made to coincide with Ocean ecology, it fills the same requirement. It is offered in the fall which makes it easier to fulfill requirements. It is currently in discussion that both Bio ocean in the water column and Ocean ecology will be required courses.

X. Other Suggestions