

Course Change Request

New Course Proposal

Date Submitted: 11/30/20 3:27 pm

Viewing: **GEOL 110 : Introduction to Oceanography Lab**

Last edit: 03/01/21 9:35 pm

Changes proposed by: muhen

Are you completing this form on someone else's behalf?

In Workflow

1. **AOES Chair**
2. **SC Curriculum Committee**
3. **SC Associate Dean**
4. Assoc Provost- Undergraduate
5. Registrar-Courses
6. Banner

Approval Path

1. 12/14/20 5:13 pm
Jim Kinter (ikinter):
Approved for AOES
Chair
2. 02/18/21 12:11 pm
Gregory Craft
(gcraft): Approved
for SC Curriculum
Committee

No

Effective Term: Fall 2020

Subject Code: GEOL - Geology

Course Number: 110

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title: Introduction to Oceanography Lab

Banner Title: Intro to Oceanography Lab

Will section titles vary by semester? No

Credits: 1

Schedule Type: Laboratory

Hours of Lab or Studio per week: 3

Repeatable: May be only taken once for credit, limited to 3 attempts (N3) **Max Allowable Credits:** 3

Default Grade Mode: Undergraduate Regular

Recommended Prerequisite(s):
None.

Recommended Corequisite(s):
GEOL 109

Required Prerequisite(s) / Corequisite(s) (Updates only):
None.

Registrar's Office Use Only - Required Prerequisite(s)/Corequisite(s):

| And/Or | (| Course/Test Code | Min Grade/Score | Academic Level |) | Concurrency? |
|--------|---|------------------|-----------------|----------------|---|--------------|
| | | | | | | |

Registration Restrictions (Updates only):

Registrar's Office Use Only - Registration Restrictions:

Field(s) of Study:

Class(es):

Level(s):

Degree(s):

School(s):

Catalog Description:

Introduction to chemical, biological, and geological aspects of oceanic environment.

Justification:

This course is being introduced to help students transferring from Virginia community colleges so that they will have an equivalent course here at Mason. It will also appeal to many Mason students who need 8 credits of Natural Science in their Mason core when paired with the proposed lecture course, GEOL 109.

Does this course cover material which crosses into another department? No

Learning Outcomes:

Students will learn about the physical (geological and chemical) and biological aspects of Earth's oceans and how these complex systems interact with each other, and with the atmosphere and lithosphere as well. Students will also develop an appreciation of human interactions with oceans and how humans pose multiple threats to these systems and what might be done to mitigate these threats.

Attach Syllabus

[geol110syl.pdf](#)

Additional Attachments

Staffing:

Several professors in AOES can teach this class and specific teaching duties will be assigned once the course is approved.

Relationship to Existing Programs:

This course should complement other Mason Core Natural Science offerings, as well as develop new recruits for the Ocean and Estuarine Science concentration in the Geology BS. We will soon seek Mason Core designation for this course.

Relationship to Existing Courses:

Currently, GEOL/BIOLEVPP 309 is called Introduction to Oceanography. We are asking that 309 be given the title Oceanography, so that the 100 level course can be called Introduction to Oceanography.

Additional Comments:

Reviewer Comments

Gregory Craft (gcraft) (01/14/21 8:11 am): changed max allowable credits to 3, per university guidelines.

Introduction to Oceanography GEOL 110

Instructor: TBA

Contact information: TBA

Class hours: TBA

Location: TBA

Course Description:

Introduction to chemical, biological, and geological aspects of oceanic environment.

Lab Text:

Laboratory Exercises in Oceanography by Bernard W. Pipkin Paperback,
ISBN:9780716737421, \$37.99

Learning Outcomes:

Students will learn about the physical (geological and chemical) and biological aspects of Earth's oceans and how these complex systems interact with each other, and with the atmosphere and lithosphere as well. Students will also develop an appreciation of human interactions with oceans and how humans pose multiple threats to these systems and what might be done to mitigate these threats.

Lab Schedule

| Week | Topic |
|-------------|---|
| 1 | Introduction/Importance of the Oceans |
| 2 | Solar system, planetary, & ocean origins |
| 3 | Plate tectonics: theory & evidence |
| 4 | Seafloor features & ocean sediments |
| 5 | Exam I & chemistry & physics of seawater |
| 6 | Ocean physics: temperature, heat flux, light & color |
| 7 | Ocean atmosphere interactions & global climate |
| 8 | Circulation: surface & deep |
| 9 | waves and surf & Extreme waves & tides |
| 10 | Exam 2 & Coastal ecosystems |
| 11 | Beaches & marine habitats |
| 12 | Marine organisms & ocean food webs |
| 13 | Marine animals & marine conservation |
| 14 | Marine conservation & present and future ocean issues |

COURSE REQUIREMENTS

1. Attendance at all scheduled laboratory sections are required to achieve the requisite level of knowledge in this course.

2. Grading

Your grade will be based on the laboratory exercises given by your instructor.

Final Grade Scale:

A+ = 97-100%

A = 93 - 96%

A- = 90 - 92%

B+ = 87 - 89%

B = 83 - 86%

B- = 80 - 82%

C+ = 77 - 79%

C = 73 - 76%

C- = 70 - 72%

D = 60 - 69%

F = 0 - 59%

MASON POLICY GUIDELINES

These university and class policies are important to understand:

Disability Accommodations

Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at George Mason University. If you are seeking accommodations, please visit <http://ds.gmu.edu/> for detailed information about the Disability Services registration process. Disability Services is located in Student Union Building I (SUB I), Suite 2500.
Email: ods@gmu.edu | Phone: (703) 993-2474
Office of Disability Services: <http://ods.gmu.edu>

Academic Integrity

The integrity of the University community is affected by the individual choices made by each of us. Mason has an Honor Code with clear guidelines regarding academic integrity. Three fundamental and rather simple principles to follow at all times are that: (1) all work submitted be your own; (2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and (3) if you are uncertain about the ground rules on a particular assignment, ask for clarification. No grade is important enough to justify academic misconduct. Plagiarism means using the exact words, opinions, or factual information from another person without giving the person credit. Writers give credit through accepted documentation styles, such as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited, using the appropriate format for this class. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting. If you have any doubts about what constitutes plagiarism, please see me.

As in many classes, a number of projects in this class are designed to be completed within your study group. With collaborative work, names of all the participants should appear on the work. Collaborative projects may be divided up so that individual group members complete portions of the whole, provided that group members take sufficient steps to ensure that the pieces conceptually fit together in the end product. Other projects are designed to be undertaken independently. In the latter case, you may discuss your ideas with others and conference with peers on drafts of the work; however, it is not appropriate to give your paper to someone else to revise. You are responsible for making certain that there is no question that the work you hand in is your own. If only your name appears on an assignment, your professor has the right to expect that you have done the work yourself, fully and independently. Mason is an Honor Code university; please see the Office for Academic Integrity for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course?

Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

Diversity and Inclusion

George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study and personal growth.

An emphasis upon diversity and inclusion throughout the campus community is essential to achieve these goals. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, and perspectives. Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected.

The reflection of Mason's commitment to diversity and inclusion goes beyond policies and procedures to focus on behavior at the individual, group and organizational level. The implementation of this commitment to diversity and inclusion is found in all settings, including individual work units and groups, student organizations and groups, and classroom settings; it is also found with the delivery of services and activities, including, but not limited to, curriculum, teaching, events, advising, research, service, and community outreach.

Acknowledging that the attainment of diversity and inclusion are dynamic and continuous processes, and that the larger societal setting has an evolving socio-cultural understanding of diversity and inclusion, Mason seeks to continuously improve its environment. To this end, the University promotes continuous monitoring and self-assessment regarding diversity. The aim is to incorporate diversity and inclusion within the philosophies and actions of the individual, group and organization, and to make improvements as needed.

Sexual Harassment, Sexual Misconduct, and Interpersonal Violence

Notice of mandatory reporting of sexual or interpersonal misconduct: As a faculty member, I am designated as a "Non-Confidential Employee," and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, stalking, sexual exploitation, complicity, and retaliation to Mason's Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance or support measures from Mason's Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

Privacy

Students must use their MasonLive email account to receive important University information, including messages related to this class. Please see <http://masonlive.gmu.edu> for more information.

Electronics

Please be respectful of our time together and do not engage in activities that are unrelated to class. Cell phones may be left on but muted and used for emergencies only.