

Submit original with signatures + 1 copy + electronic copy to UAF Governance.

See <http://www.uaf.edu/uafgov/faculty/cd> for a complete description of the rules governing curriculum & course changes.

TRIAL COURSE OR NEW COURSE PROPOSAL

SUBMITTED BY:

Department	GPMSL	College/School	SFOS
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1. ACTION DESIRED (CHECK ONE): Trial Course ☐ New Course ☒

2. COURSE IDENTIFICATION: Dept **MSL** Course # **663** No. of Credits **3**

Justify upper/lower division status & number of credits:

This is a stacked 400/600 level course intended for students with a background in general chemistry and marine science. There will be 3 hours of lecture per week. Homework assignments, a synthesis paper (graduate level), and a presentation will be required. The grading criteria will differ between the two levels. A greater level of sophistication and understanding will be expected from graduate students and this should be demonstrated in the students' assignments and exams. In addition, a higher workload (homework and exams) will be required from graduate students.

3. PROPOSED COURSE TITLE: Chemical Coastal Processes

4. To be CROSS LISTED?
YES/NO

No

If yes, Dept:

Course #

(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

5. To be STACKED?
YES/NO

Yes

If yes, Dept.

MSL

Course #

463

6. FREQUENCY OF OFFERING:

Alternate Spring semesters

Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) — or As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING (if approved)

Spring 2013

8. COURSE FORMAT:

NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council. Furthermore, any core course compressed to less than six weeks must be approved by the core review committee.

COURSE FORMAT:
(check all that apply)

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☒ 6 weeks to full semester

OTHER FORMAT (specify)

Mode of delivery (specify lecture, field trips, labs, etc)

9. CONTACT HOURS PER WEEK:

3

LECTURE
hours/weeks

☐

LAB
hours /week

☐

PRACTICUM
hours /week

Note: # of credits are based on contact hours. 800 minutes of lecture=1 credit. 2400 minutes of lab in a science course=1 credit. 1600 minutes in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit. This must match with the syllabus. See <http://www.uaf.edu/uafgov/faculty/cd/credits.html> for more information on number of credits.

OTHER HOURS (specify type)

10. COMPLETE CATALOG DESCRIPTION including dept., number, title and credits (50 words or less, if possible):

MSL S663Chemical Coastal Processes

3 credits Offered Spring Odd-numbered years

A study of chemical processes in the coastal ocean. This course will examine chemical interactions at different boundaries, and explore physical and biological controls on the chemistry of coastal environments. Some of the topics to be covered include: The role of suspended particles; coastal acidification; photochemical processes; controls on coastal productivity; future challenges in coastal management. This course is intended for students with a background in general chemistry and marine science. *Prerequisite:* Upper-division standing, general chemistry (e.g. CHEM 105 and CHEM 106), general oceanography (e.g. The Oceans-MSL 111), or permission from instructor for undergraduates, or graduate standing. Stacked with MSL 463 (3+0)

11. COURSE CLASSIFICATIONS: (undergraduate courses only. Use approved criteria found on Page 10 & 17 of the manual.

If justification is needed, attach on separate sheet.)

H = Humanities ☐

N = Natural Science ☐

S = Social Sciences ☐

Will this course be used to fulfill a requirement for the baccalaureate core? YES ☐ NO ☒

IF YES, check which core requirements it could be used to fulfill:

O = Oral Intensive, Format 6 ☐

W = Writing Intensive, Format 7 ☐

Natural Science, Format 8 ☐

12. COURSE REPEATABILITY:

Is this course repeatable for credit? YES ☐ NO ☒

Justification: Indicate why the course can be repeated
(for example, the course follows a different theme each time).

How many times may the course be repeated for credit? TIMES

If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course? CREDITS

13. GRADING SYSTEM: Specify only one.

LETTER: ☒ PASS/FAIL: ☐

RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES

For MSL 663 Graduate Standing. For MSL 463 Upper-division standing, general chemistry e.g. CHEM 105 and CHEM 106), general oceanography (e.g. The Oceans -MSL 111), or permission from instructor.

These will be *required* before the student is allowed to enroll in the course.

RECOMMENDED

Classes, etc. that student is strongly encouraged to complete prior to this course.

15. SPECIAL RESTRICTIONS, CONDITIONS None

16. PROPOSED COURSE FEES

\$0

Has a memo been submitted through your dean to the Provost & VCAS for fee approval?

Yes/No

17. PREVIOUS HISTORY

Has the course been offered as special topics or trial course previously?

Yes/No

No

If yes, give semester, year, course #, etc.:

18. ESTIMATED IMPACT

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

No impact on budget, facilities/space. The instructor, a recently hired SFOS faculty, is developing this course to help fulfill her teaching workload (2-3 courses per academic year).

19. LIBRARY COLLECTIONS

Have you contacted the library collection development officer (kljensen@alaska.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

No

Yes

☒

Communication with Anne Christie (Biosciences Library) determined the material required for the course is available from the library collection. An updated list of readings will be provided to Anne to ensure reading material is available to students during the class period.

20. IMPACTS ON PROGRAMS/DEPTS

What programs/departments will be affected by this proposed action?

Include information on the Programs/Departments contacted (e.g., email, memo)

A positive impact is expected on the GPMSL by increasing the available courses offered to its students. As part of a minor in Marine Science (paperwork submitted concurrently), this course will contribute to courses offered to MSL minors. A course in chemical coastal processes will be of interest to Fisheries and Environmental Chemistry students (graduate and undergraduate).

21. POSITIVE AND NEGATIVE IMPACTS

Please specify **positive and negative** impacts on other courses, programs and departments resulting from the proposed action.

No negative impacts are expected from this course. The MSL program will be impacted positively by offering a course that focuses on the coastal ocean, as the course will promote a better understanding of chemical interactions in coastal waters, and will be useful for students whose research takes place in coastal environments.

JUSTIFICATION FOR ACTION REQUESTED

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

The coastal ocean is particularly vulnerable to environmental change. Understanding interactions among physical, chemical, and biological processes is necessary to predict and address the effects of ongoing environmental changes. Recent developments, including coastal acidification, eutrophication, and hypoxia in productive coastal regions highlight the need for understanding the chemical interactions involved. Currently the MSL program only offers one graduate course (MSL F626) that focuses on coastal/shelf processes, and it does so from a physical standpoint. Two chemistry-focused courses offered (MSL 660 and MSL 670) address the global ocean, touching only briefly on chemical coastal processes. The proposed course will provide students with a detailed study of chemical processes in the coastal ocean, adding depth and complementing information from the existing courses. The 400-level version is intended to reach upper-division undergraduates interested in the coastal ocean. The two levels will be differentiated by the expected workload and level of understanding. Graduate students will be expected to demonstrate deeper understanding through the homework assignments and exams and will be required to submit a heavier workload.

APPROVALS:

	Date	
Signature, Chair, Program/Department of:		
	Date	
Signature, Chair, College/School Curriculum Council for:		
	Date	
Signature, Dean, College/School of:		
	Date	
Signature of Provost (if applicable)		
Offerings above the level of approved programs must be approved in advance by the Provost.		

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

	Date	
Signature, Chair, UAF Faculty Senate Curriculum Review Committee		

ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

	Date	
Signature, Chair, Program/Department of:		
	Date	
Signature, Chair, College/School Curriculum Council for:		
	Date	
Signature, Dean, College/School of:		

ATTACH COMPLETE SYLLABUS (as part of this application).

Note: The guidelines are online: <http://www.uaf.edu/uafgov/faculty/cd/syllabus.html>

The department and campus wide curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course change will be denied.

SYLLABUS CHECKLIST FOR ALL UAF COURSES

During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

1. Course information:

- ☐ Title, ☐ number, ☐ credits, ☐ prerequisites, ☐ location, ☐ meeting time
(make sure that contact hours are in line with credits).

2. Instructor (and if applicable, Teaching Assistant) information:

- ☐ Name, ☐ office location, ☐ office hours, ☐ telephone, ☐ email address.

3. Course readings/materials:

- ☐ Course textbook title, ☐ author, ☐ edition/publisher.
- ☐ Supplementary readings (indicate whether ☐ required or ☐ recommended) and
- ☐ any supplies required.

4. Course description:

- ☐ Content of the course and how it fits into the broader curriculum;
- ☐ Expected proficiencies required to undertake the course, if applicable.
- ☐ Inclusion of catalog description is *strongly* recommended, and
- ☐ Description in syllabus must be consistent with catalog course description.

5. ☐ Course Goals (general), and (see #6)

6. ☐ Student Learning Outcomes (more specific)

7. Instructional methods:

- ☐ Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).

8. Course calendar:

- ☐ A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say “lab”. Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.

9. Course policies:

- ☐ Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.

10. Evaluation:

- ☐ Specify how students will be evaluated, ☐ what factors will be included, ☐ their relative value, and
- ☐ how they will be tabulated into grades (on a curve, absolute scores, etc.)

11. Support Services:

- ☐ Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

12. Disabilities Services:

The Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials.

- ☐ State that you will work with the Office of Disabilities Services (208 WHIT, 474-5655) to provide reasonable accommodation to students with disabilities.”