

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
Prepared by	Z. Kowalik	Phone	474-7753
Email Contact	zkowalik@alaska.edu clneumann@alaska.edu	Faculty Contact	Z. Kowalik

1. ACTION DESIRED (CHECK ONE):	Trial Course	<input type="checkbox"/>	New Course	<input checked="" type="checkbox"/>	Yes
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2. COURSE IDENTIFICATION:	Dept	MSL	Course #	622	No. of Credits	3
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Justify upper/lower division status & number of credits:

Upper division with basic background in physics, hydrodynamics and mathematics (intro to calculus); 3credits

3. PROPOSED COURSE TITLE:	Tides-their Nature and Impacts
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4. To be CROSS LISTED? YES/NO	No	If yes, Dept:	<input type="text"/>	Course #	<input type="text"/>
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(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

5. To be STACKED? YES/NO	No	If yes, Dept.	<input type="text"/>	Course #	<input type="text"/>
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6. FREQUENCY OF OFFERING:	Spring, Even-numbered Years
	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, 2012
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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)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input checked="" type="checkbox"/> 6 weeks to full semester
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OTHER FORMAT
(specify)

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

Class-room lectures supplemented by numerical calculations of tidal parameters

9. CONTACT HOURS PER WEEK:	3	LECTURE hours/weeks	<input type="text"/>	LAB hours /week	<input type="text"/>	PRACTICUM hours /week	<input type="text"/>
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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)	<input type="text"/>
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10. COMPLETE CATALOG DESCRIPTION including dept., number, title and credits (50 words or less, if possible):

Course Title: Tides-their Nature and Impacts; Credits: 3

Course Description: It will provide students in marine sciences with in-depth knowledge on tides and the role of tides in the physical, biological, chemical and geological processes in the oceans. We will investigate importance of tides for the coastal regions of the Bering Sea and North Pacific. We will also cover associated aspects such as tidal currents and their role in transport of sediments, zooplankton and fish larvae, harnessing the tidal power for the generation of electricity and impact of tides on climate.

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		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	x
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:	X	PASS/FAIL:	
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RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES	Basic background in oceanography (MSL F620), mathematics (Math F201X), or instructor's permission. Baccalaureate degree in physics, engineering, mathematics or equivalent.
These will be required before the student is allowed to enroll in the course.	
RECOMMENDED	physical oceanography or fluid dynamics
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	

17. **PREVIOUS HISTORY**

Has the course been offered as special topics or trial course previously?	Yes/No	yes
If yes, give semester, year, course #, etc.:	Spring Semester 2004 and Spring Semester 2006, MSL 697, MSL F 693 F01. Title: Tides: Nature & Impacts, and also as individual study course and Physical Oceanography Seminar.	

18. ESTIMATED IMPACT

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

Salary support of instructor and long-distance delivery. This course will be part of Dr. Kowalik regular workload for teaching.

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	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	Adequate media facilities are available within SFOS, and collections at the UAF main and satellite libraries and with the instructors. Supplemental hand-outs of publications will be provided to the students as appropriate. I have discussed on Oct. 25, 2010 with A. Christie from
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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)

The purpose of the course is to provide basic background on tides and their influence on fishery, biology, chemistry and geology of the oceans the topics which are not being covered in any of the present core courses in oceanography at UAF. Therefore, all programs in SFOS (GPMSL and Fishery) will be strengthen by this action as this branch of oceanography will promote comprehensive education of the fishery, biology, chemistry and physical oceanography students.

21. POSITIVE AND NEGATIVE IMPACTS

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

Students in geology, chemistry and biology (as well in physical oceanography) will acquire a comprehensive understanding on how tides shape physics, biology, chemistry and geology in the World Ocean. This background will provide them with expertise to address practical issues relating to their field of research. No negative impacts are expected.

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 course will describe tidal phenomena to both specialists and non-specialists who need some knowledge of tidal processes, including physical oceanographers, geologists of beach or marine sedimentation processes, and biologists who explore interconnection of tides and ocean life. Mathematics will be kept to a minimum.

The purpose of the course is to provide basic background on tides and describe significance of tides for life in the ocean and for harnessing the power, topics which are not being covered in any of the present courses at UAF. This course will help students to develop a quantitative knowledge of the tidal dynamics and acquire tools to solve practical problems in the shelf environment. The course will include description of the tidal influence on the mixing of the vertically stratified waters, transport of nutrients and sediments. The students will learn the principles of the tidal pumping mechanism for transporting nutrient-rich offshore water into the shallower regions.

The course will also include discussions on the possible effect of tides on periodical climate change, and catastrophic sea level changes caused by storm surge and perigean tide (tides of increased range).

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."