### 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	t GPMSL			College/School		SFOS			
Prepared by	Ana M. Aguilar-Islas			Phone		907 474 1524			
Email Contact	amaguilarislas@alaska.edu clneumann@alaska.edu			Faculty Contact		Ana M. Aguilar-Islas			
1. ACTION DES	Tria		X	New	New Course				
2. COURSE IDENTIFICATION:		Dept	MS	L	Course #	No. of Credits		redits	3
Justify upper/lower division status & number of credits:  This upper division/graduate level course is 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.									
3. PROPOSED O	COURSE TITLE:	Chemical Coastal Processes							
4. To be CROSS LISTED? YES/NO		No		s, Dept:			rse #		
(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)									
5. To be STACKE YES/NO	ED?	Yes	If yes	, Dept.	MSL	Cour	rse # 463		
6. FREQUENCY	6. FREQUENCY OF OFFERING: Alternate Spring								
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 2011									
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 X 6 weeks to full semester						approved by			
OTHER FORMAT (specify)  Mode of delivery (specify lecture, field trips, labs, etc)									
9. CONTACT HOURS PER WEEK:  3 LECTURE hours/weeks hours /week 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 min in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit. This must match with syllabus. See http://www.uaf.edu/uafgoy/faculty/cd/credits.html for more information on number of credits.						. 1600 minutes			
OTHER HOURS (specify type)									

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

# MSL S694Chemical Coastal Processes

# 3 credits Offered Spring

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. Topics include: Photochemical processes; the role of suspended particles; coastal acidification; controls on coastal productivity; future challenges in coastal management. This course is intended for students with a background in general chemistry and marine science.

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	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 = Human		separate site	Ot.)	S = Social S	ciences				
	Will this course be us for the baccalaureate		ll a requirem	ent		YES	N	X X		
	IF YES, check which c	ore requir	ements it cou							
	O = Oral Intensive,	•		W = Writing Intens	ive, Format 7	Na	atural Science, Fo	ormat 8		
	2. 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								
12 (7)										
13. GF	RADING SYSTEM: Spe LETTER: X		one. S/FAIL:							
REST	RICTIONS ON ENROL	LMENT (	if any)							
	REREQUISITES	For M	SL 694 Gra	duate Standing. F Oceans (MSL 111)				M 105 and		
	The			fore the student is a						
R	PECOMMENDED Classe			mical Oceanograp trongly encouraged						
15 \$				None None	i to complete p	orior to this cou	irse.			
Has	a memo been submitted th		\$0 ur dean to th	e Provost & VCAS	for fee approv	/al?				
Yes/No										
	REVIOUS HISTORY  Has the course been offer  Yes/No	red as spe	cial topics o	r trial course previo	ously?		No			
	If yes, give semester, yea	r, course ‡	‡, etc.:							
18. ESTIMATED IMPACT										
18. ES	STIMATED IMPACT									
	WHAT IMPACT, IF ANY									
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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.

APPROVALS:						
	Date					
Signature, Chair, Program/Department of:						
	Date					
Signature, Chair, College/School Curriculum Council for:						
	B					
Signature, Dean, College/School of:	Date					
Cignature of Drawart (if analisable)	Date					
Signature of Provost (if applicable) Offerings above the level of approved programs must be approved in ac	lvance by the Provost.					
ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION	TO THE GOVERNANCE OFFICE					
	_					
Signature, Chair, UAF Faculty Senate Curriculum Review Committee	Date					
Eighten 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, Charl, Conego Benoof Carriedam Council 161.						
	Date					
Signature, Dean, College/School of:						

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#### 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 <u>denied</u>.

#### 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."

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