

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.

3/12/2011 -
 Originals sent to GEOS in Jan. have not been rec'd.
[Signature]

TRIAL COURSE OR NEW COURSE PROPOSAL

SUBMITTED BY:

Department	SFOS	College/School	SFOS
Prepared by	Sam VanLaningham	Phone	907-474-6991
Email Contact	svanlaningham@alaska.edu	Faculty Contact	Sam VanLaningham
	clneumann@alaska.edu		

1. ACTION DESIRED (CHECK ONE): Trial Course New Course

2. COURSE IDENTIFICATION: Dept Course # No. of Credits

Justify upper/lower division status & number of credits: Interdisciplinary, term paper, advanced critical thinking. Part of Marine Science Minor submitted concurrently with this course.

3. PROPOSED COURSE TITLE:

4. CROSS LISTED? YES/NO If yes, Dept: Course #
 (Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

5. STACKED? YES/NO If yes, Dept: Course #

6. FREQUENCY OF OFFERING:
 (Every or Alternate) Fall, Spring, Summer — or As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING (if approved) or Fall 2011, depending upon date of approval. 4/9/2011 jbh

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 one) 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 330 The Dynamic Alaskan Coastline 3 credits
 Mountains, rivers, glaciers, fjords, estuaries, deltas, tidal zones, sediments, nutrients, elements, habitats, fish. This class will provide an interdisciplinary perspective on the dynamic Alaskan coastal landscape from Glacier Bay to the Arctic. We will delve into the driving geological, geochemical, and oceanographic processes occurring along Alaska's coast and linkages to various marine ecosystems.

Students will learn the fundamental physical and geochemical processes in the coastal zone using various locations in Alaska as examples. Must be at least a junior in standing; MSL111X or GEOS 101; CHEM F105X; PHYS F103X or PHYS F211X. Field trip required. (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:**

LETTER: PASS/FAIL:

RESTRICTIONS ON ENROLLMENT (if any)

14. **PREREQUISITES** Must be Junior in standing. MSL111X or GEOS 101; CHEM F105X; PHYS F103X or PHYS F211X.

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**

Field trip required.

16. **PROPOSED COURSE FEES**

\$200

Has a memo been submitted through your dean to the Provost & VCAS for fee approval? Yes/No Yes

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.:

Fall 2010, MSL/GEOS F394

18. **ESTIMATED IMPACT**

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

One classroom is needed. Nominal additional budget considerations. One faculty member for lectures. It will be taught as part of VanLaningham's regular workload.

19. **LIBRARY COLLECTIONS**

Have you contacted the library collection development officer (ffklj@uaf.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

Conversation on 12/1/09. The discussion with Anne Christie at the library concluded that the library has the appropriate resources for this course and that the chapter excerpts taken from several texts are within the allowable limit (<15% of total text) set by copyright law.

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)

This new course will benefit SFOS/MSL by providing depth to the concurrently proposed minor in marine science. In discussions with GEOS faculty (Beget and Coakley), this course will provide new avenues for geology majors interested in coastal geology and environmental science, as well as breadth to their geomorphic offerings.

21. **POSITIVE AND NEGATIVE IMPACTS**

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

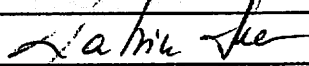
The course will fill a void in coastal geology, and complement existing courses such as geomorphology (GEOS 304) and Marine and Freshwater Fishes of Alaska (FISH F288). It will also foster interdisciplinary learning and collaboration, as I expect fisheries and coastal- and ecologically-minded geology students to come together in this course. The fieldtrip early in the semester will build relationships among students from different disciplines and get them to think together in the field with their combined strengths.

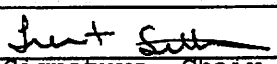
JUSTIFICATION FOR ACTION REQUESTED

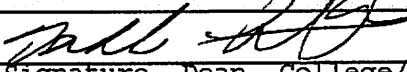
The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory.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

Considering that Alaska makes up ~50% of the United States coastline, it is important that we develop students who understand the large-scale processes at the land-ocean interface. It is dually important that future scientists, policy makers, and Alaskans realize the linkages between, and sensitivity of, the landscape and ecosystems living in it. Because the content of the class is interdisciplinary, it needs to be offered at the 300 level. Junior status should be when our students begin to think critically and understand intertwined processes. This is also the time when they should be developing writing skills to communicate their ideas.

APPROVALS:

 Date 05 Jan 11
Signature, Chair,
Program/Department of: GEOS

 Date 8/05/11
Signature, Chair, College/School Curriculum
Council for: SFOS

 Date 1/10/11
Signature, Dean, College/School
of: SFOS

Signature of Provost (if applicable) Date

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

Signature, Chair, UAF Faculty Senate Curriculum Review Committee Date

ADDITIONAL SIGNATURES: (If required)

<i>Michael T. Whal</i>	Date	3/17/11
Signature, Chair, Program/Department of: Geology + Geophysics		

<i>[Signature]</i>	Date	3/31/11
Signature, Chair, College/School Curriculum Council for: CNSM		

<i>[Signature]</i>	Date	4/1/11
Signature, Dean, College/School of: CNSU		

Note: It is not clear from the ^{syllabus} ~~proposal~~ that this course will be cross listed between GEOS 1052. If it is, I approve it. *[Signature]* I do see when it is listed as cross listed on pg 1




School of Fisheries and Ocean Sciences

245 O'Neill, University of Alaska Fairbanks, P.O. Box 757220, Fairbanks, Alaska 99775-7220
(907) 474-7824, FAX (907) 474-7204, www.sfos.uaf.edu

MEMORANDUM

TO: Rainer Newberry, UAF Curriculum Review Committee Chair

FROM: Trent Sutton, SFOS Curriculum Committee Chair 

SUBJECT: MSL/GEOS 330 The Dynamic Alaskan Coastline

DATE: 05 January 2011

The SFOS Curriculum Committee has conditionally approved the course MSL/GEOS 330 The Dynamic Alaskan Coastline that has been developed by instructor Sam VanLaningham. During the review process, members of the SFOS Curriculum Committee requested that Dr. VanLaningham revise the opening line of his course description to be a complete and grammatically correct sentence. Dr. VanLaningham has refused to make this change, citing his right to academic freedom in developing his course description. The SFOS Curriculum Committee does not support this noncompliance. However, this course is part of the recently submitted Minor in Marine Science proposal, and the committee did not want to hold up the review process for this degree program or have to exclude MSL/GEOS 330 from the list of course offerings for the minor.

ATTACH COMPLETE SYLLABUS (as part of this application).

Note: syllabus must follow the guidelines discussed in the Faculty Senate Guide <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 Student Learning Outcomes (more specific)

6. 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.).

7. 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.

8. Course policies:

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

9. 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.)

10. Support Services:

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

11. 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 accomodation to students with disabilities."

MSL330 – The Dynamic Alaskan Coastline

Instructor: Dr. Sam VanLaningham
Office: 334 IRVING II
Phone: 474-6991
Email: svanlaningham@alaska.edu

Class Time: T-Th 11:30am – 1:00pm
Location: 214 O'Neill
Office Hours: T-Th 2–4pm, or by appt.

Course Description:

Mountains, rivers, glaciers, fjords, estuaries, deltas, tidal zones, sediments, nutrients, elements, habitats, fish. This course will provide an interdisciplinary perspective on the dynamic Alaskan coastal landscape from Glacier Bay to the Arctic. We will delve into the driving geological, geochemical, and oceanographic processes occurring along Alaska's coast and linkages to various marine ecosystems. Students will learn the fundamental physical and geochemical processes in the coastal zone using various locations in Alaska as examples. Must be at least a junior in standing; MSL111X or GEOS 101; CHEM F105X; PHYS F103X or PHYS F211X. Field trip required. 3 Credits.

Course Learning Objectives:

- Appreciate the scope of coastal variability in Alaska, the fundamental processes occurring at the coast and develop skills in thinking across traditional fields of science.
- Learn how develop interdisciplinary scientific question and write about it concisely.
-

Prerequisites:

Must be at least a junior in standing; MSL111X or GEOS 101; CHEM F105X; PHYS F103X or PHYS F211X.

Course Overview:

This course is a combination of lectures, 4 homeworks, a field trip, a midterm, final and term paper.

Weekend Field Trip Required (Friday afternoon to Sunday Night).

Fri. – To Black Rapids, Delta River (overnight).

Sat.– To Valdez.

Sun.– Valdez to Fairbanks.

Term paper

Four well-written pages regarding a recent or past change in the physiographic setting, climate, and/or geology of a region of Alaska/the Arctic and the effects/response of the ecosystems to these natural or human-related perturbations. Must have at least 7 references from scientific journals and/or published books and at least one figure/table.

Paper should be double-spaced, 11 or 12 point font and include the following sections: Title, Abstract, Introduction, Methods, Discussion, Conclusion, and References. You will be graded on your ability to make a landscape-ecosystem-Alaska link, the quality of your hypothesis or question, clarity, organization and references.

Course policies:

Field trip is mandatory. You are expected to attend lectures, take notes, ask questions. Grades will be based on a term paper (40%, or 40 pts), midterm (20%, or 20 pts), final (20%, or 20 pts), 4 homework assignments (20%, or 20 pts total). The total points possible is 100. Make-up work is available only for serious illness or family emergencies. Please contact instructor as soon as possible if you have these circumstances so that we can plan accordingly. Special accommodations for disability are available and if you contact instructor we will make the course work for you. Contact the Office of Disabled Services as well (907-474-5655; TTY 907-474-1827; Email = fydso@uaf.edu).

Academic integrity is important to the University of Alaska and to you as a student. There is a zero tolerance policy for cheating and/or plagiarism.

There is no required text. Readings will be from *Our changing coastlines* by Francis P. Shepard and Harold R. Wanless, *Coastal Geomorphology* by Eric Bird, *Principles of Terrestrial Ecosystem Ecology* by Chapin, Matson, and Mooney, *Tectonic Geomorphology* by Burbank and Anderson, and other miscellaneous sources. These chapters have been scanned and placed on the libraries ERes website:

<http://eres.uaf.edu/eres/coursepage.aspx?cid=1238&page=docs>

Readings from *Tectonic Geomorphology* are available directly through UAF Goldmine. Login with your elmo ID/password to download the readings or whole book: http://login.proxy.library.uaf.edu/login?url=http://www.UAF.eblib.com/EBLWeb/patron?target=patron&extendedid=P_437442_0&

Other readings are available at my website:
<http://mather.sfos.uaf.edu/~samvan/other.html>

Grading scale is:

93-100% = A
90-92% = A-
87-89% = B+
83-86% = B
80-82% = B-
77-79% = C+
73-76% = C
70-72% = C-
67-69% = D+

63-66% = D
 60-62% = D-
 59% and below = Fail

Schedule (tentative)

WEEK	THEME
SEP 2	Overview of coastal Alaskan geologic, oceanographic/climate, ecosystem setting. <i>Blackboard Readings: Coastal Geomorphology, Ch. 2; Climate/ocean circulation system handout, Ecosystems Ecology Ch. 1, 2, 4.</i>
SEP 7/9	Overview of coastal Alaskan geologic, oceanographic/climate, ecosystem setting, cont. <i>Blackboard Readings: Coastal Geomorphology, Ch. 2; Climate/ocean circulation system handout, Ecosystems Ecology Ch. 1, 2, 4.</i>
SEP 14/16	Overview of coastal Alaskan geologic, oceanographic/climate, ecosystem setting, cont. <i>Blackboard Readings: Coastal Geomorphology, Ch. 2; Climate/ocean circulation system handout, Ecosystems Ecology Ch. 1, 2, 4.</i>
SEP 21/23	Glacier Bay – glacial features and processes, intertidal/subtidal zone. Glacial retreat and faunal succession. Relation to Gulf of Alaska marine ecosystem. <i>Blackboard Readings: Our Changing Coastline Ch. 13. Coastal Geomorphology Ch. 10. Long-term Ecological Change in the Northern Gulf of Alaska handout.</i>
SEP 28/30	Copper River - glacial-fed delta, eolian processes, migratory birds, fish populations/variety, ecosystem diversity. <i>Blackboard Readings: Our Changing Coastline Ch. 13.</i>
OCT 5/7	Prince William Sound - land – open ocean environment. Ocean circulation, nutrient transport, physical and ecosystem change and response to human-related change.
OCT 12/14	Wrangell-St. Elias - 9 of 16 North American highest peaks = Tectonics. Erosional processes, tectonic uplift, orography, climate-tectonic linkages. <i>Blackboard Readings: Our Changing Coastline Ch. 13. Tectonic Geomorphology Ch. 1,3,7</i> Homework 1 (THURS DISCUSSION)
OCT 19/21	Cook Inlet. Tidal processes, estuaries, surface circulation, sediment routing paths and the controls on nearshore ecosystems. <i>Blackboard Readings: Our Changing Coastline Ch. 13. Coastal Geomorphology, Ch. 11.</i> Homework 2 (THURS DISCUSSION)
OCT 26/28	Cook Inlet. Tidal processes, estuaries, surface circulation, sediment routing paths and the controls on nearshore ecosystems. <i>Blackboard Readings: Our Changing Coastline Ch. 13. Coastal Geomorphology, Ch. 11.</i> Paper Topic Outline Due
NOV 2/4	MIDTERM NOVEMBER 2 Katmai – Volcanic processes, Aleutian volcanoes, 1912 eruption, rivers/lake chemical and physical changes, red salmon. <i>Blackboard Readings: Our Changing Coastline Ch. 13. Volcanoes handout.</i>

NOV 9/11	Katmai – Volcanic processes, Aleutian volcanoes, 1912 eruption, rivers/lake chemical and physical changes, red salmon. Submarine Canyons. <i>Blackboard Readings: Our Changing Coastline Ch. 13. Volcanoes handout.</i> Homework 3 (THURS DISCUSSION)
NOV 16/18	Bering Land Bridge - archaeology, sea level, physical oceanography (oceanic gateways), Northern Hemisphere climate. <i>Blackboard Readings: Our Changing Coastline Ch. 14.</i>
NOV 23	Yukon River/Delta - deltaic processes, sea level change, drainage reorganization, ecosystem diversity. <i>Blackboard Readings: Our Changing Coastline Ch. 14. Coastal Geomorphology, Ch. 3, 12.</i>
NOV 30/ DEC 2	Yukon River/Delta - deltaic processes, sea level change, drainage reorganization, ecosystem diversity. <i>Blackboard Readings: Our Changing Coastline Ch. 14. Coastal Geomorphology, Ch. 3, 12.</i>
DEC 7/9	Arctic coast/Brooks Range - permafrost, sea ice, rapid coastal erosion, deltas. <i>Blackboard Readings: Our Changing Coastline Ch. 14.</i> Homework 4 (THURS DISCUSSION)
DEC 16	10:15am – 12:15pm FINAL. Term paper due.

Curriculum Committee SFOS

Members: Trent Sutton (Chair)
Katrin Iken
Jeremy Mathis
Andre Lopez

08 December 2010

New Course

Course Number: MSL 330

Course Title: The Dynamic Alaska Coastline

Instructor: VanLaningham

First Time of Offering: No

General Recommendations:

On the last page of the course proposal form is a checklist of components to be included in the syllabus. Be sure to go through this checklist to make sure all components are addressed. Failure to do so could result in the delay of getting this course proposal through the UAF Curriculum Review Committee.

Faculty Senate Form:

Clarify and Address the following:

- Throughout the form and syllabus, list GEOS (it is GEOG).
- The cross-listed course is GEOG 330, not 320.
- For course identification section, need to state that the proposed Marine Science minor has been submitted concurrently.
- For contact hours, state “800 minutes of lab during 2.5 day field trip will replace 1/3 lecture credit”. Also, field trip is two words. Change throughout form and syllabus.
- The catalog description (section 10) must appear as it will in the actual catalog; you must include the credits, prerequisites, and course format (e.g., 3+0); you only had the course title and description. Your course description must match the syllabus. Also, the first line of the description is not a sentence so please remove. Same for syllabus.
- Need a new course fee memo.
- Estimated impact – will this course be taught as part of your regular workload? Who is the second instructor for field trips and how is that individual being paid?
- Section 20. This is a new course not a trial course. Remove “soon-to-be” and state that the paperwork for the minor has been submitted concurrently.
- Section 21. How does this course complement the existing courses that are listed?
- Justification. Line 2, insert “and” between makers, and Alaskans.

Syllabus:

- The course description on the syllabus must match the course description on the form (UAF requirement).
- Move course learning objectives to immediately below course description. However, what you list as learning objectives is the course goal. Identify learning outcomes/objectives for the course.
- Course overview – list 4 homework assignments. However, state 3 homework assignments in course policies. Please resolve.
- Term paper. Must have 7 references – exactly, at least, or at most?
- How many points to get an A, B, C, etc.? How many total points for the class? Be very clear on this section.
- Course schedule is very cluttered and hard to follow. Please clean up. For several consecutive week periods, you have the same listing (e.g., Sept 28/30 and Oct 5/70. Are they really the same?

MEMORANDUM

TO: Dr. Susan Henrichs, Provost
University of Alaska Fairbanks

*Approved
Susan Henrichs
1/14/11*

FROM: Sam VanLaningham, Assistant Professor
School of Fisheries and Ocean Science

THROUGH: Dr. Michael Castellini, Dean
School of Fisheries and Ocean Science

Michael Castellini 1/20/11

SUBJECT: Additional Fees (3 Day Field Trip)

DATE: December 17, 2010

I am asking for approval of the following fees for the new trial course, *The Alaskan Coastline* (MSL/GEOS 330).

The field trip for this course gives hands-on experiences in river/coastal environments. It provides a natural laboratory for students to think together and independently across disciplines, and develop strategies on how to combine their collective knowledge to solve important environmental problems.

I would like the following fees charged:

Total: \$200.00

This is increased from \$150 and covers van rentals, fuel, lodging and food for the three-day endeavor. This includes staying at the lodge at Black Rapids Friday night and Totem Inn for Saturday. Friday dinner and Saturday breakfast is included in the lodging costs. The students and faculty will prepare all other meals.

The request to increase costs by \$50 per student came about simply because the field trip was not ideally budgeted the first time around.

If you have any questions, please contact me at 474-6991 or samvan@sfos.uaf.edu.