TRIAL COURSE OR NEW COURSE PROPOSAL

| SUBMITTED BY: |  |
|---------------|  |
| Department    | Northern Studies |  |
| Prepared by   | Laura Schneider  |  |
| Email Contact | llugar@alaska.edu|  |
| College/School|  | CLA |
| Phone         |  | 7126 |
| Faculty Contact|  | Maribeth Murray |

1. ACTION DESIRED
(CHECK ONE):
- [ ] Trial Course
- [x] New Course

2. COURSE IDENTIFICATION:
- Dept:  
- Course #: 474
- No. of Credits: 3
- Justify upper/lower division status & number of credits:
  - Advanced concepts, integrative writing with high standards for required analysis, standard 3 credit format

3. PROPOSED COURSE TITLE:
- The Changing Arctic: Scientific and Social Perspectives on Change, Adaptation, and Sustainability in the North

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

5. To be STACKED?
   - YES/NO
   - If yes, Dept.
     - Course #
   - Stacked course applications are reviewed by the (Undergraduate) Curricular Review Committee and by the Graduate Academic and Advising Committee. Creating two different syllabi—undergraduate and graduate versions—will help emphasize the different qualities of what are supposed to be two different courses. The committees will determine: 1) whether the two versions are sufficiently different (i.e. is there undergraduate and graduate level content being offered); 2) are undergraduates being overtaxed?; 3) are graduate students being undertaxed? In this context, the committees are looking out for the interests of the students taking the course. Typically, if either committee has qualms, they both do. More info online—see URL at top of this page.

6. FREQUENCY OF OFFERING:
- Every Spring
- Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) — or As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING
- (AY2013-14 if approved by 3/1/2013; otherwise AY2014-15)
- AY 2013-14

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

- OTHER FORMAT (specify)
  - In class and distance delivery

9. CONTACT HOURS PER WEEK:
- 3 LECTURE hours/week
- 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. 2400-8000 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit. This must match with the syllabus. See [http://www.uaf.edu/unigov/faculty-senate/curriculum/course-degree-procedures/-/guidelines-for-teaching/] for more information on number of credits.

- OTHER HOURS (specify type)

10. COMPLETE CATALOG DESCRIPTION including dept., number, title, credits, credit distribution, cross-listings and/or stacking (50 words or less if possible):

   Example of a complete description:

   FISH F487 W, O Fisheries Management
   3 Credits Offered Spring
Theory and practice of fisheries management, with an emphasis on strategies utilized for the management of freshwater and marine fisheries. Prerequisites: COMM F131X or COMM F141X; ENGL F111X; ENGL F211X or ENGL F213X; ENGL F414; FISH F425; or permission of instructor. Cross-listed with NRM F487. (3+0)

NORS 474  The Changing Arctic: Scientific and Social Perspectives on Change, Adaptation, and Sustainability in the North
3 Credits  Offered Spring

An introduction to the Arctic System: atmosphere, ice, land surface, oceans and people, and unknown biological, chemical, physical and social interactions and controls. The Arctic is responding rapidly to globally driven environmental change. Ways researchers are working to understand environmental change in the arctic, ways northern people are responding to changes, and strategies for adaptation, mitigation and sustainability are considered. Links to global-scale environmental, political, social and economic drivers are explored and initiatives for assessing and addressing a changing Arctic are evaluated. Prerequisites: Junior standing or higher or permission of instructor. (3+0)

11. COURSE CLASSIFICATIONS: Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H classification appropriately; otherwise leave fields blank.
   H = Humanities  S = Social Sciences  X

Will this course be used to fulfill a requirement for the baccalaureate core? If YES, attach form.
   YES:  NO:  X

IF YES, check which core requirements it could be used to fulfill:
   O = Oral Intensive, Format 6  W = Writing Intensive, Format 7  Natural Science, (“X” for Core) Format 8

11.A Is course content related to northern, arctic or circumpolar studies? If yes, a “snowflake” symbol will be added in the printed Catalog, and flagged in Banner.
   YES  X  NO

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 for credit, what is the maximum number of credit hours that may be earned for this course?
   CREDITS

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. Note: Later changing the grading system for a course constitutes a Major Course Change.
   LETTER:  X  PASS/FAIL:

RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES

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

Reference the registration implications below due to Banner coding of terms:
Prerequisite: Course completed and grade of “C” (2.0) or higher prior to registration for the course that requires it.
Concurrent: Course may be taken simultaneously (and allows for a course to have been previously completed).
Co-requisite: Courses MUST be taken simultaneously and does NOT allow for the fact that a course was previously completed!
16. PROPOSED COURSE FEES
   $0.0
   Has a memo been submitted through your dean to the Provost for fee approval?
   Yes/No

17. PREVIOUS HISTORY
   Has the course been offered as special topics or trial course previously?
   Yes/No
   If yes, give semester, year, course #, etc.: To be offered as NORS 498 spring 2013

18. ESTIMATED IMPACT
   WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.
   We estimate no impact. This will part of Dr. Murray’s teaching workload in NORS

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 X A graduate version of this class as an independent study was taught in spring 2012. Resources are more than sufficient.

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 will be a terrific addition to courses offered to NORS BA & MA students. We believe it will be of
   great interest to students in a variety of disciplines.

21. POSITIVE AND NEGATIVE IMPACTS
   Please specify positive and negative impacts on other courses, programs and departments resulting from the proposed action.
   No discernible impact on other programs, but it's a great opportunity for students, not just in Northern
   Studies, but also in geography and other areas with a focus on northern research.

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.

This class represents an effort by NORS to extend our curriculum to include interdisciplinary coverage of
current issues in arctic research.
APPROVALS: Add additional signature lines as needed.

Signature, Chair, Program/Department of: [Signature]
Date 10-4-12

Signature, Chair, College/School Curriculum Council for: [CLA]
Date 12-18-12

Signature, Dean, College/School of: [CLA]
Date 12/23/12

Offerings above the level of approved programs must be approved in advance by the Provost.

Signature of Provost (if above level of approved programs)
Date

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

Signature, Chair
Date

Faculty Senate Review Committee: ___Curriculum Review ___GAAC
___Core Review ___SADAC

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

Signature, Chair, Program/Department of:
Date

Signature, Chair, College/School Curriculum Council for:
Date

Signature, Dean, College/School of:
Date
Breehan Yauney <boyauney@alaska.edu>

NORS 474

Siri Tuttle <sgtuttle@alaska.edu>
To: Breehan Yauney <boyauney@alaska.edu>

Tue, Dec 18, 2012 at 12:55 PM

Breehan,

I'm pretty sure I didn't see this revision. In any case, it looks to me as if all committee requests have been attended to. I consider it approved. Let me know if there's anything special we need to do to make the approval formal.

Siri Tuttle

[Quoted text hidden]
NORS 474
The Changing Arctic: Scientific and Social Perspectives on Change, Adaptation, and Sustainability in the North

Course Description
This class provides a comprehensive introduction to the Arctic System and all its constituent components: atmosphere, ice, land surface, oceans and people, and its known biological, chemical, physical and social interactions and controls. The Arctic is a regional component of the Earth System, which due to its unique physical conditions, is responding very rapidly to globally driven environmental change. Here, ways in which the academic community is working to better understand environmental change in the arctic, ways that northern societies are responding to these changes, and evolving strategies for improving various stakeholder collaborations that address adaptation, mitigation and sustainability are considered. The links to global-scale environmental, political, social and economic drivers of arctic change are explored and international initiatives for assessing and addressing a changing Arctic are evaluated.

Goals and Learning Outcomes
1. To understand what comprises the constituent components of the Arctic System and how those components interact, force, and respond to natural and anthropogenic changes and global drivers.
2. To explore the multiple ways that the research and stakeholder communities are working to observe, understand and respond effectively to a changing arctic.
3. To develop analytical and critical thinking skills necessary to evaluate existing science and adaptive planning documents, and assessment and monitoring programs with respect to addressing scientific goals as well as objectives for adaptation to and mitigation of problems stemming from arctic environmental change.
4. To explore new conceptual approaches, models and methods for collaborative research and problem solving among arctic research and stakeholder communities.
5. To learn to assess evidence-based approaches to understanding system change and consider how these can further goals of sustainability and inform a diverse public.

Course Information
Program: Northern Studies
Course Number: NORS 474
Number of Credits: 3
Contact Hours: 3 hours/week (lecture and seminar) and online delivery
Prerequisites: Junior standing or permission of the instructor
Location: TBD
Offered: Spring

Required Readings
Evaluation

Letter Grades +/-

A range = 90-100 (A-= 91-93, A=94-96, A+=97-100), B range 90-80, C range 80-70, D range 70-60, F 60 or below

Weekly participation in seminar and discussion/discussion board 10%

Future Coasts/ArcticSmartic/Greenify Interactive Gaming 20%
10% for participation, 10% from summative learning evaluation survey

Case Study – Oral Presentation 20%
Due weeks of April 9, 16, 23 as assigned during the first week of class. Grade based on presentation content, and preparation and clarity of accompanying visual material.

Case Study Summative Evaluation – Written, 15-20 pages. 30%
Due 27 April 2012 Grade based on content, clarity of discussion and analysis, grammar and spelling.

Final Exam 20%

Class Schedule and Readings

All readings will be placed on Blackboard or, in the case of books or sections of books, placed on reserve in the library. There is no textbook.

Ice Is Nice, ArcticSmartic and Greenify are interactive games designed to teach student and adult learners about the relationship between environmental change at the poles and issues of sea level rise, economic development and geopolitics. Student participation and learning outcomes are assessed through a series of question and answer session that follow completion of the game(s).

Week 1 23-27 January
1. Introduction, overview of syllabus and class policies.
2. Geographic and geopolitical boundaries
3. Introduction to the Arctic System – Physical Components
   Sea Ice and Cryosphere
4. Introduction to Greenify

Readings


Week 2 30 January-3 February
1. Arctic System continued – Physical Components
   Atmosphere and Ocean

Readings

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The Changing Arctic: Scientific and Social Perspectives on Change, Adaptation, and Sustainability in the North

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CRCC (Coastal Response Research Center) 2009. Opening the Arctic Seas: Envisioning Disasters and Framing Solutions. Coastal Response Research Center, University of New Hampshire, Durham.


**Week 3 6-10 February**
1. Arctic System continued – Biological Components
   Terrestrial and Marine Ecosystems
2. Ice is Nice

**Week 4 13-17 February**
1. Arctic System continued – Human Component
   Cultural Groups
   Economic Diversity
   Political Diversity

**Week 5 20-24 February**
1. System Interactions and Systems Thinking
   Biological, Chemical, Physical and Social

**Week 6 27 February – 2 March**
1. Arctic System Change
   Recent observations of change
   Linkages among changes
   Drivers of change
   Natural and Anthropogenic

Readings:


Post, E., M. C. Forchhammer, et al. (2009). Ecological Dynamics Across the Arctic Associated with Recent
Week 7 5-9 March

1. Research questions stemming from arctic change
   - Discipline-based
   - Interdisciplinary
   - National, Pan-Arctic and International

Readings:


Week 8 12-16 March SPRING BREAK

Week 9 19-23 March

1. Societal impacts and responses to arctic change
   - Economic development and impacts in the face of rapid change
   - Individual and community health and well-being
   - Interaction with and disconnection from the global system

Readings:


Week 10 26-30 March

1. Improving knowledge through collaboration
   - Stakeholder communities
   - Strategies for building research/stakeholder partnerships
   - Citizen-science
   - Science for society in the north and beyond

Readings:


Martello, M.L. 2008. Arctic indigenous peoples and representations and
doi: 10.1177/0306312707083665


**Week 11 2-6 April**
1. Knowledge to Action and the Science Policy Interface
   Stumbling blocks, disconnects, and barriers to communication
   Issues of scale – local to Pan-Arctic
   Competing interests
   ArcticSmartic

Readings:

**Week 12 9-13 April**
1. Case Study 1 – Science Planning, Implementation and Application

Readings:

**Week 13 16-20 April**
1. Case Study 2 – Regional and Pan-Arctic Assessments

Readings:


**Week 14 23-27 April**
1. Case Study 3 – Anticipating the Future and Managing for Change, Adaptation, and Sustainability

Readings:
CRCC (Coastal Response Research Center) 2009. *Opening the Arctic Seas: Envisioning The Changing Arctic: Scientific and Social Perspectives on Change, Adaptation, and Sustainability in the North*
Disasters and Framing Solutions. Coastal Response Research Center, University of New Hampshire, Durham.

Week 15 30 April-4 May
1. Review and Preparation for Final

UAF Policies

You are expected to adhere to the Academic Code of Honor as outlined in the University of Alaska Catalog. A note on borrowing: remember that copying from an author without attribution is plagiarism; using the ideas and results of many with attribution and clear acknowledgement of the source(s) is the first step in research. If you are found to have plagiarized, failed to properly cite, reference and/or properly attribute the work of others, you will fail the class.

Attendance and Late Policy

Students are expected to attend class. This class involves extensive classroom/online participation, much of which cannot be made-up after the fact. Excused absences from class will not be factored into participation grades, unexcused absences will impact participation grades. Late assignments will be not be accepted, unless the student asks for permission well ahead of time (minimum two weeks) or has an understandable emergency during the week an assignment is due (illness, accident, etc.).

Disabilities

The University of Alaska provides equal access for all students with disabilities. The Office of Disabilities Services implements the Americans with Disabilities Act (ADA) to ensure that all students have equal access to campus facilities and course material. Please advise in writing if you need special consideration. If you have questions, please contact the Office of Disabilities Services at (907) 474-5655.

Cell Phones and Computers in Class

In class, computer use is for class purposes only. Cell phones are not welcome and should be turned off and put away – no chatting and no texting. If you anticipate an emergency and need to have access to your phone, please let the instructor know in advance.
<table>
<thead>
<tr>
<th>Prominence and Initiative</th>
<th>Delivery of Post</th>
<th>Relevance of Post</th>
<th>Contribution to the Learning Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not respond to most postings; rarely participates freely</td>
<td>Utilizes poor spelling and grammar in most posts; posts appear &quot;hasty&quot;</td>
<td>Posts topics which do not relate to the discussion content; makes short or irrelevant remarks</td>
<td>Does not make effort to participate in learning community as it develops; seems indifferent</td>
</tr>
<tr>
<td>Responds to most postings within a 24 hour period; requires occasional prompting to post</td>
<td>Errors in spelling and grammar evidenced in several posts</td>
<td>Occasionally posts off topic; most posts are short in length and offer no further insight into the discussion topic</td>
<td>Occasionally makes meaningful reflection on group's efforts; marginal effort to become involved with group</td>
</tr>
<tr>
<td>Consistently responds to postings in less than 24 hours; demonstrates good self-initiative</td>
<td>Consistently uses grammatically correct posts with rare misspellings</td>
<td>Consistently posts topics related to the discussion content; cites additional references related to topic</td>
<td>Consistently attempts to motivate the group discussion; presents creative approaches to topic</td>
</tr>
<tr>
<td>Responds to most posts within several days after initial discussion; limited initiative</td>
<td>Frequently posts topics that are related to the discussion content; prompts further discussion of topic</td>
<td>Expresses opinions and ideas in a clear and concise manner, with obvious connection to topic</td>
<td>Frequently attempts to direct the discussion and present relevant viewpoints for consideration by group</td>
</tr>
</tbody>
</table>

**Online Discussion Rubric**