May 19, 2011

The Graduate Academic and Advisory Committee of the Faculty Senate approved the following trial course:

UNDERGRADUATE COURSE REQUEST

SCHOOL OF NATURAL RESOURCES AND AGRICLTURAL SCIENCES
(Submitted by Geography)

11-Tr. Trial Course: GEOG F694 - Climate Change Processes: Past, Present, Future, 4 credits (4+0); cross-list as ATM F694; stacked as GEOG F404 and ATM F404 respectively;

[redacted]

prerequisites include Senior standing, in major, in geography or natural sciences, or permission of instructor; letter graded; effective Fall 2011.

Effective: Fall 2011

Rationale: See request attached

APPROVED: Susan Jennette DATE 5/20/11
Chancellor's / Provost's Office

FORMAT 1

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	GEOGRAPHY	College/School	SNRAS
Prepared by	Patricia Heiser	Phone	7068
Email	[redacted]	[redacted]	[redacted]

[redacted]

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

2. COURSE IDENTIFICATION: Dept GEOG Course # 694 No. of Credits 4

Justify upper/lower division status & number of credits: Course designed for senior Geog or Nat Science majors.

3. PROPOSED COURSE TITLE: Climate Change Processes: Past, Present, Future

4. To be CROSS LISTED? YES If yes, Dept: ATM, Course # 694

literacy in the rapidly developing field of climate-change science. Students will gain a thorough understanding of Earth climate dynamics and change through the study of both climate history and modern climate processes. Students will be trained to critically evaluate

[redacted]

APPROVALS: Signatures on file at the Governance Office.

	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)			

[redacted]

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

ATTACH COMPLETE SYLLABUS (as part of this application).
Note: The guidelines are online: http://www.uaf.edu/uafgov/faculty/cd/syllabus.html

[redacted]

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

[redacted]

GEOGRAPHY (ATM/BIO) *694*

Climate Change Processes: Past, Present, and Future

4 CREDITS

Instructors:

Dr. Daniel Mann (primary), Geography Program, School of Natural Resources, UAF
dhmann@alaska.edu , phone: 474-6929. Office: Scenario Network Arctic Planning, Denali Building.

Dr. Uma Bhatt Department of Atmospheric Sciences, 474-2662, bhatt@gi.alaska.edu,

Meeting: Course meets 3 lectures hours per week + 1 hour discussion group/recitation
Time and location TBA

Course Description

This course is a survey of climate change science extending from the paleo-record to modern

Student Learing Outcomes:
Students who are successful in this class will learn these things:

- The basic climate history of Earth including the details of events that occurred during the last 100,000 years, with emphasis on Last Glacial Maximum to Holocene transition

- A basic understanding of how the atmosphere, ocean, cryosphere, and biosphere interacted in the course of climate changes in the past.

Week	Topic	Tuesday 1.5 hours	Thursday 1.5 hours	Friday 1 hour	Key Text
Week 1	Introduction to Paleoclimate Reconstruction	J - Mann	J - Mann	J - Bhatt & Mann	Ruddiman
Week 2	Precambrian/Mesozoic Climates	J - Mann	S- Mann	J - Bhatt & Mann	Ruddiman

Exams, Assignments and Grading:

Exam 1	Paleoclimates	15%
Exam 2	Climate Dynamics	15%
[redacted]		

Literature Search	10%
Article Review	10%
Semester Project	20%
Project Presentation	15%

Exams will cover lecture materials and will be in multiple-choice, short answer and essay format. Students will conduct a literature search in a topic of their choosing. Review and present one article for discussion. Students will work on a semester-length term paper on a topic chosen in [redacted]

regarding article review assignments, field trip report, and semester project will be posted on

Grade Expectations: All grades are determined on an absolute score as above (with no curve) In general, grades will reflect the following about your class performance:

A = 90-100 percent: outstanding work, mastery of topic

[redacted]

[redacted]

GEOGRAPHY (ATM/BIO) 494

Climate Change Processes: Past, Present and Future

[redacted]

Instructors:

Dr. Daniel Mann (primary), Geography Program, School of Natural Resources, UAF
dhmann@alaska.edu , phone: 474-6929. Office: Scenario Network Arctic Planning, Denali Building.

[redacted]

Office Hours: MWF 9:30-10:30 and by appointment

Dr. Uma Bhatt Department of Atmospheric Sciences, 474-2662, bhatt@gi.alaska.edu,
IARC 307 Office Hours: T-Th – 12:00-1:00PM and by appointment (send email)

Meetings: Course meets 3 lectures hours per week + 1 hour discussion group/recitation

[redacted]

Student Learing Outcomes:
Students who are successful in this class will learn these things:

- The basic climate history of Earth including the details of events that occurred during the last

Fridays—ATM and GEOG students meet to exchange information and view movies. These [redacted]

special topics. The Friday sessions will usually be joint, but may occasionally meet separately. In general these sessions will develop the skills needed to communicate with a wider audience (see above).

	Change			Mann	

Exams, Assignments and Grading:

Exam 1	Paleoclimates	15%
Exam 2	Climate Dynamics	15%
Field Trip Report		15%
Literature Search		10%
Article Review		10%
Semester Project		20%
Project Presentation		15%

Exams will cover lecture materials and will be in multiple-choice, short answer and essay format. Students will conduct a literature search in a topic of their choosing. Review and present one article for discussion. Students will work on a semester-length term paper on a topic chosen in

regarding article review assignments, field trip report, and semester project will be posted on Blackboard.

C- 71-70 1.7
D+ 69-67 1.3
D 66-62 1.0
D- 61-60 0.7

Grade Expectations: All grades are determined on an absolute score as above (with no curve) In