

Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500).

~~For the Department of Geology and Geophysics, please submit a complete description of the proposed~~

F194

curriculum & course changes.

TRIAL COURSE OR NEW COURSE PROPOSAL

SUBMITTED BY:

Department	Department of Geology and Geophysics	College/School	CNSM
Prepared by	Jessica Larsen	Phone	7992
Email	jlarsen@alaska.edu	Faculty Contact	Jessica Larsen

1. ACTION DESIRED

(CHECK ONE):

Trial Course

New Course

Survey of natural hazards and the disasters they cause, with emphasis on Alaska.

The trial version of this course will have very low impact. It will serve as 3 credits of Prof. Larsen's teaching load (already approved in 2010-2011 Workload). The course will require classroom facilities with standard projection and computer equipment. The instructor will investigate making

JUSTIFICATION FOR ACTION REQUESTED

applications to make sure that the quality of IIAF 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

APPROVALS: Add additional signature lines as needed.

Samh Jewell Date 9/12/11
Signature, Chair, Program/Department of: Geology + Geophysics

[Signature] Date 9/12/2011
Signature, Chair, College/School Curriculum Council for: _____

Paul Hays Date 9/13/11
Signature, Dean, College/School of: D.A. Ken

Signature of Provost (if applicable) Date _____

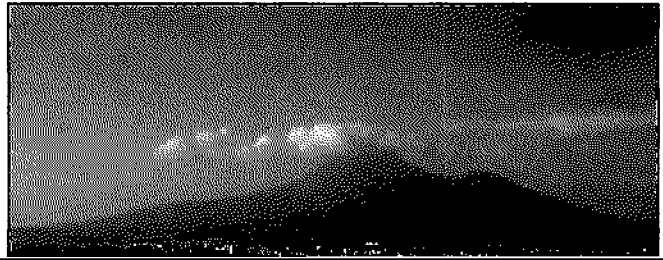
ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE COMMANDER OFFICE

**Trial Course: Natural Hazards
and Disasters**

**SYLLABUS: (GEOS F1XX, 3
credits) Spring 2012**

INSTRUCTOR: Jessica Larsen

OFFICE: 2510 011



writing, sociology, political science, public policy, emergency management, and business. A primary objective is to give students a working knowledge of the science behind natural hazards, to help them better prepare for their chosen careers.

To meet this goal the course objectives are: 1) Explore major types of geologic and

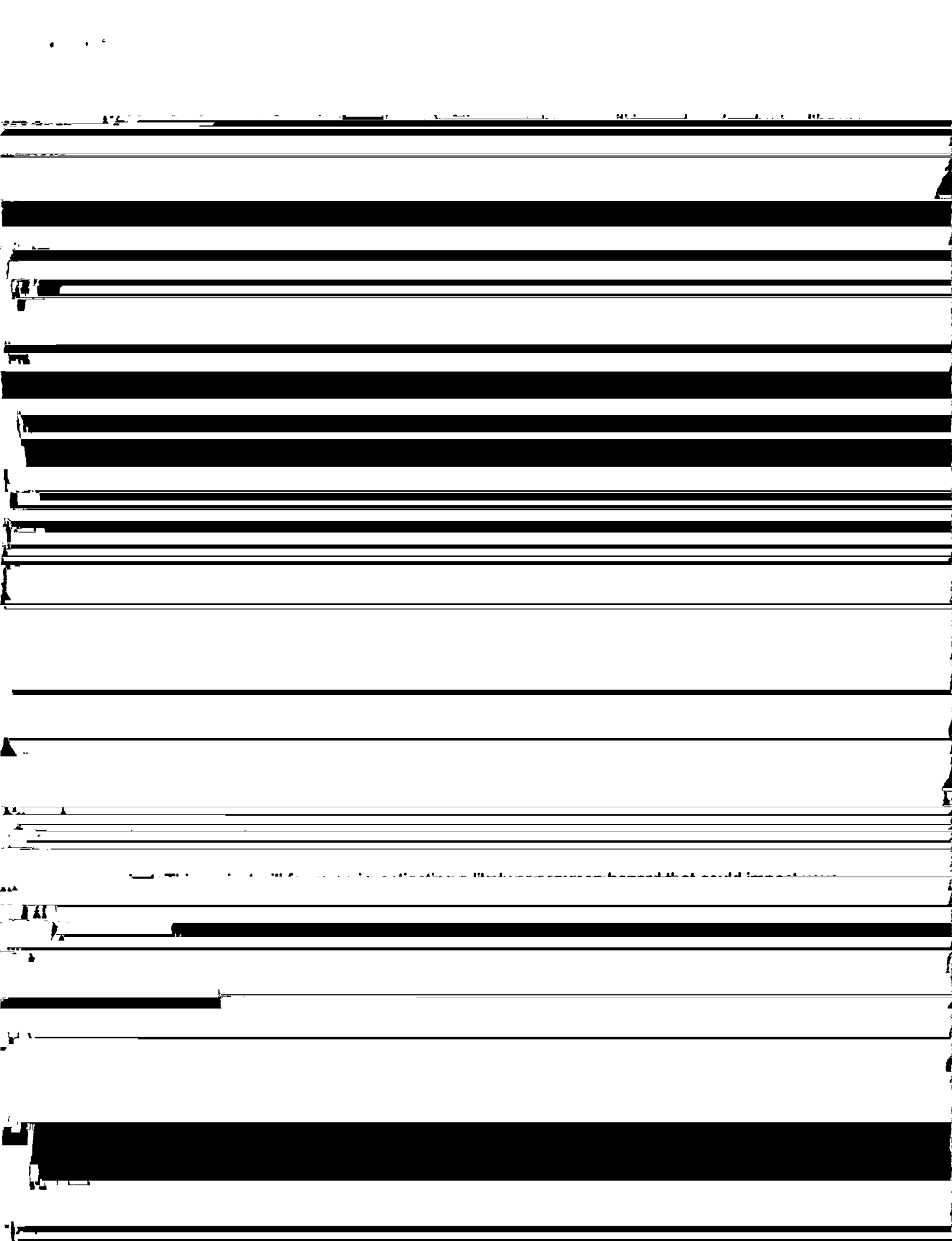
climate/weather related hazards, and the geoscience behind their causes. 2) Examine "case studies" that present ways that humans have tried to mitigate disasters associated with different types of hazards. 3) Explore the resulting societal impacts through case studies of recent hazardous events. 4) Apply what is learned in lecture through in-class and associated homework activities.

LEARNING OUTCOMES

At the end of the course, you will begin to see how geoscientists specializing in hazardous

phenomena view the natural and human world. The course will provide avenues to apply what you have learned through class, homework, case study, and writing activities. Upon completion, you will be able to:

- ❖ Explain the basic science behind geologic and climate/weather related natural hazards (i.e. as a teacher instructing his/her pupils)



Proposed Lecture Schedule (to be modified as needed)

DATE	LECTURE	HOMEWORK/ACTIVITY	READING ASSIGNMENT
1/19	Introduction		CH 1
1/24	Plate Tectonics		CH 2
1/26	Earthquakes: Causes		CH3
1/31	Earthquakes: Mitigation		CH4
2/2	<i>In class activity</i>	Great Earthquakes	
2/7	Tsunamis		CH5
2/9	<i>In class activity</i>	Japan, 2011	
2/14	Volcanoes & Eruptions		CH 6
2/16	Volcano Hazards & Mitigation		CH7
2/21	<i>In class activity</i>	Mt. Redoubt, Alaska	
2/23	Landslides		CH 8
2/28	Sinkholes/Subsidence		CH 9
3/1	EXAM #1		
3/6	Climate Change		CH 10
3/8	<i>In class activity</i>	TBD	

The final exam will be given during the scheduled day/time during Finals week:

May 7-10