Resilience Seminar I
Anth/Biol/Econ/NRM 667 (1 credit)
Fall 2017

COURSE INFORMATION
Meeting time: **Mondays 4:30 -5:30 pm** beginning September 11.
Class Location: Murie 330
Prerequisites: Participation in the Resilience and Adaptation Program or permission of instructor

INSTRUCTOR:
Dr. Lawrence Duffy
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TEXTBOOK: Arctic Resilience Report (2016). Arctic Council. Stockholm Resilience Center.

COURSE OBJECTIVE: The objective of the Resilience Seminar is to provide a forum for new students of the Resilience and Adaptation Program to explore and apply issues of sustainability and interdisciplinary studies relevant to research in the North.

COURSE LEARNING GOALS: Upon completion of this course students will…

- Understand rewards and challenges of interdisciplinary research,
- Gain exposure to logistics of interdisciplinary research and interpreting interdisciplinary peer-reviewed journal articles,
- Understand how and under what circumstances resilience theory and research is being applied in the "real world".

ACTIVITIES AND METHODS:
This course takes a student-active, learning-by-doing approach to achieve the above stated learning goals for the course. Together, we will gain exposure to interdisciplinary research by discussing the Arctic Resilience Report. Invited speakers will guide us through principles of interdisciplinary collaboration, research ethics, how to navigate the IRB process, publishing in an interdisciplinary journal, etc. Readings and discussion will complement the concepts covered by the speakers.

Study Problem Statement:

Resilience theory has emerged as a promising framework to bridge social and natural science disciplines and address how social-ecological systems might navigate rapid changes (Chapin et al. 2009). A decade ago, when the research and debate on resilience theory was first gaining traction around the globe, few post-secondary education courses integrated the social-ecological systems (SES) resilience concept into curricula. Today, the concept has gained momentum, entered the vernacular for discussions on climate change and sustainability (Bristow 2010, Shaw 2012), and begun to enter the curriculum at several universities (eg. University of Alaska Fairbanks, Stockholm University, Cornell University). However, resilience is criticized for being a "slippery concept" and a new buzzword for federal and non-federal agencies (Davoudi 2012). As a result, applying resilience theory in real-world situations such as community planning for climate change can be problematic and difficult for practitioners (Harrow 2009, Shaw 2012, Davoudi 2012, Harrison 2013), including recent graduates from university programs that provide extensive training in SES resilience theory. New tools have been published to try to facilitate the application of resilience thinking outside of the theoretical realm (eg. resilience assessment toolkit, Resilience Alliance 2010; resilience education toolkit, Spellman 2015).

Possible questions we could ask:

1) What aspects of SES resilience theory are most commonly applied in the field?
2) Is the SES resilience framework for certain types of problems or projects more than others?
3) Does the frequency of use or the aspects of the theory utilized vary by employment sector (eg. resource management, conservation, education, governance, social justice, academia, planning, etc.) or by other factors?

EVALUATION: Grades will be Pass or Fail. Evaluation will be based on level and quality of each student's participation in the following key assignments.

KEY ASSIGNMENTS (and weight for grading):

1) Required readings and participation in class discussion (40% of grade)– Students will complete the required readings or assignments prior to class for the dates indicated in the course schedule below.

2) Literature review (30% of grade) – Each student will write a 2-3 page literature review to help support the writing of the introduction and discussion sections of the study we conduct together. Reviews may address the following questions of how resilience theory is being applied in the real world, or may address another aspect of the study question that may evolve as we delve into the topic:

- How has resilience theory been successfully applied for practical purposes in the past?
- What tools exist for facilitating its use by communities or agencies?
- What are the challenges to using resilience theory for planning and management?

What are the advantages?
- Is it used in certain sectors more than other sectors (i.e. wildlife management, environmental justice, etc.)?

3) Thesis Proposal Outline (30% of grade)- By the end of the fall semester, each student will submit a brief (1-2 pages) summary of their thesis topic that gives title, research question/hypothesis, and general approach for their anticipated thesis chapters. A proposal is required by the Graduate School for each student and this gives the RAP faculty a chance to provide feedback on your developing research topic. If you already have a full proposal written, you may submit your full proposal.

COURSE SCHEDULE

Date	Course Outline
September 11	Approval of syllabus Introduction to central course project: Arctic Resilience Assessment
September 18	Rewards and Challenges of Interdisciplinary Research
September 25	Research Ethics • Begin CITI training, instructions at http://www.uaf.edu/irb/training/
October 2	Arctic Change Chapter 1
October 9	Multiple Arctics
October 16	Arctic Regime Shifts
October 23	Arctic Regime Shifts
October 30	What Factors Build or Erode Resilience in the Arctic?
November 6	What Factors Build or Erode Resilience in the Arctic? con
November 13	Policy Context Shared Decision Making
November 20	Living with Change
November 27	Building Capacity to Adapt
December 4	Looking Ahead

UAF POLICIES: Students are expected to read, understand, and adhere to the academic honor code detailed in the UAF Catalog.

Department Policy on Cheating: The Resilience & Adaptation Program's Policy on Cheating is: "Any student caught cheating will be assigned a course grade of F. The student's academic advisor will be notified of this failing grade and the student will not be allowed to drop the course."

UAF Attendance Policy:
You are expected to attend classes regularly; unexcused absences may result in a failing grade. You are responsible for conferring with your instructor concerning absences and the possibility of arranging to make up missed work.
If you are required to participate in either (a) military or (b) UAF-sponsored activities that will cause you to miss class, you must notify your instructor as soon as possible of your absence. You must notify your instructor(s) of all scheduled UAF-required absences for the semester (e.g., travel to athletic events) during the first week of classes.
You and your instructor will make a good faith effort to make suitable arrangements to assure that you can make up classes and work you miss and are not penalized for your excused absence. If suitable arrangements cannot be made, you will be allowed to withdraw from the course without penalty. However, your instructor is under no obligation to allow you to make up missed work for unexcused absences or if notification and arrangements are not made in advance of the absence.

Disabilities: Students with a physical or learning disability are required to identify themselves to the Disability Services office, located in the Center for Health and Counseling in order to receive special accommodations. The student must provide documentation of the disability. Disability Services will then notify me of special arrangements for completing the course work requirements.