

Resilience Seminar II: Methods for Interdisciplinary Research
NRM 668 F01, CRN 35874
Spring 2017
1 credit, Pass/Fail

Location and Meeting Time: Tuesday 3:40-5:10pm, in AHRB 183

Instructor:

Dr. Katie Spellman International Arctic Research Center
207 Akasofu Building
Phone: 907-388-5178
Email: klspellman@alaska.edu

Office Hours: Arranged by appointment.

Course Description:

This course aims to provide graduate students with an overview of research methods used in various social and bio-physical sciences. Each week, students will be given an introduction to a particular method. In some cases, students will also have the opportunity to employ skills in using a particular method. Additionally, students will learn about courses and resources on and off campus for learning more about that type of research. Topics range from climate modeling, to conducting surveys, to community-based and action research, and include both traditional and emerging methods used in a range of social and natural science disciplines.

This course was first offered in 2010 as the result of years of discussion among students in the Resilience and Adaptation Program and Alaska EPSCoR. It has been developed especially for students conducting interdisciplinary research. The class will benefit students early in their graduate degree who want exposure to a variety of methods for addressing their research questions. It will also benefit students at any stage of their graduate degree who plan to pursue a career that requires collaboration with people from outside their discipline, or the ability to utilize a broad array of research tools.

Course Objective:

To provide students with a basic understanding and skills in research methods used in the social and natural sciences.

As an outcome of this course, students will be able to:

- Understand the basic theory and assumptions of methods used in a broad range of disciplines
- Perform some of the skills commonly used to design projects, collect data, analyze data, and communicate/use research outcomes.
- Identify UAF courses and other resources for learning about a particular method in depth
- Better comprehend and communicate with researchers outside their primary discipline

Instructional Format:

A guest instructor with expertise in a particular research method will teach each 1 1/2-hour seminar. Most seminars will include lecture, discussion, and perhaps another interactive component.

Required Reading:

Reading materials will be placed on Blackboard (classes.uaf.edu).

Recommended Text:

Cresswell, J.W. 2008. Research design: qualitative, quantitative and mixed methods design.
ISBN-10: 1412965578

On Amazon, you can rent this book for \$16, or purchase a new one from ~\$31- \$63.

Attendance Policy & Grading:

This course will be graded as Pass/Fail. Attendance and participation in 13 of the 15 seminars is required in order to pass this course. Students are expected to arrive on time and give focused attention to course activities, lectures, and discussions. Active participation in each seminar is expected.

Disabilities Services

The instructors will work with the Office of Disabilities Services (208 Whitaker Bldg, 474-5655) to provide reasonable accommodation to students with disabilities. Any student needing special accommodation should talk with the instructors before the class. Those discussions will be kept confidential.

Course Schedule

Jan. 17	Course Introduction and Syllabus A framework for social-ecological systems research (Dr. Katie Spellman)
Jan. 24	Designing and Conducting Surveys (Dr. Peter Fix)
Jan. 31	Photo-voice Method for Action Research (Dr. Ellen Lopez)
Feb. 7	Using GIS (Dr. David Verbyla)
Feb. 14	Remote Sensing for Everybody (Dr. Falk Huettmann)
Feb. 21	TBD Student Choice – Potential options: Mapping Local Knowledge, Case Study Research, etc.
Feb. 28	Citizen Science research methods (Dr. Elena Sparrow)
Mar. 7	Historical study research methods: why we pay attention to history, historic documentation, and interpretation (Dr. Bill Schneider)
Mar. 14	NO CLASS (spring break)
Mar. 21	Introduction to Climate Modeling (Dr. Vladimir Alexeev)
Mar. 28	Enthnographic research methods (Dr. Caroline Brown, ADFG)
Apr. 4	Methods for framing an interdisciplinary thesis (Dr. Katie Spellman)
Apr. 11	Qualitative methods to assess local knowledge (Dr. Kimberley Maher, DNR)
Apr. 18	Videography (Dr. Maya Saganek)
Apr. 25	Brief Student Presentations- interdisciplinary methods applicable to their research