Interdisciplinary Research Methods - Resilience Seminar II
BIOL/NRM 668 F01, CRN 36424
Spring 2020
1 credit, Pass/Fail

Location and Meeting Time: Tuesday 3:40- 5:10, Web only
Zoom connection: https://alaska.zoom.us/j/86207441097

Instructor:

Dr. Tracie Curry
Affiliate Assistant Professor
International Arctic Research Center
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Office Hours: Arranged by appointment.

Course Description:
Social and environmental systems are intertwined and complex, requiring the effective collaboration of diverse actors with wide-ranging expertise to understand and address contemporary challenges (e.g. climate change, environmental justice, conservation, natural resource management). This 1-credit seminar aims to provide graduate students with an overview of research methods, frameworks, and collaboration strategies used in interdisciplinary research projects that span social and bio-physical sciences. We will explore the dynamics of interdisciplinary research through discussion of the literature on topics such as project planning and evaluation, ethics and data sharing, and cross-disciplinary communication. The course will also feature guest lectures and hands-on experience using a particular method each week from a range of disciplines in the social and natural sciences. Both traditional and emerging methods will be covered, including climate modeling, survey research, qualitative analysis, the intersection of art and science, participatory action research, and community-based research, or others desired by the seminar students. Additionally, students will learn about courses and resources on and off campus for learning more about each research methodology.

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:
During most classes, a guest instructor with expertise in a particular research method will teach each 1.5-hour seminar. Most seminars will include lecture, discussion, and perhaps another interactive component such as hands-on practice of a particular research method. Several class sessions are also dedicated to skill building on conceptual frameworks and design of interdisciplinary research.

Required Reading:
Reading materials will be placed in a shared Google Drive folder entitled "NRM/BIOL_668". Students will receive a notification when new readings are uploaded.

Attendance Policy & Grading:
This course will be graded as Pass/Fail. Attendance and participation in 8 of the 10 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. **The last class (Session 10), will involve up to 10 minutes presentation from each student on how they are conceptualizing their research based on applicable interdisciplinary frameworks and methods.**

Technical Requirements for Course:
Students must have regular access to a computer and the Internet to access online materials in Google Drive. Students will be expected to download course material as well as upload assignments.

Course Schedule

Session	Date	Topic	Speaker
1	1/19	Course introduction and syllabus Core concepts of social-environmental systems and interdisciplinary research	Dr. Tracie Curry
2	1/26	Methods for framing an interdisciplinary thesis or study program	Dr. Katie Spellman
3	2/2	Considerations for interdisciplinary collaborative teams	Barbara Johnson
	2/9	No Class: Alaska Forum on the Environment	
4	2/16	Survey research design Qualitative content analysis	Dr. Peter Fix Dr. Tracie Curry
5	2/23	ANCSA 50th Anniversary - Implications for society and research	Dr. Bill Schneider
6	3/2	Place-based and participatory research approaches	Dr. Tracie Curry and TBD
	3/9	No Class: Spring Break	
7	3/16	Climate modeling	Dr. Nancy Fresco
8	3/23	Interdisciplinary approaches to visual arts, research, and communication	Seth Adams and Dr. Tracie Curry
9	3/30	Student choice	TBD
	4/6	No Class: One Health One Future Conference	
10	4/13	Student presentations	
	4/20	Flex day	

Past Student Choice:

Using GIS (Dr. Santosh Panda); Cross-cultural research (Dr. Richard Hum); Citizen Science research methods (Dr. Katie Spellman); Photo-voice method for participatory action research (Dr. Ellen Lopez); Program design and evaluation (Angela Larson, Goldstream Group LLC.); Thinking in multiple worldviews (Dr. Richard Hum); Videography (Dr. Maya Salganek)

STUDENT PROTECTIONS STATEMENT

UAF embraces and grows a culture of respect, diversity, inclusion, and caring. Students at this university are protected against sexual harassment and discrimination (Title IX). Faculty members are designated as responsible employees which means they are required to report sexual misconduct. Graduate teaching assistants do not share the same reporting obligations. For more information on your rights as a student and the resources available to you to resolve problems, please go to the following site: https://catalog.uaf.edu/academicsregulations/students-rights-responsibilities.

I will work with the Office of Disability Service to provide reasonable accommodation to students with disabilities. Contact information: uaf-disability-services@alaska.edu
Phone: 907.474.5655 or TTY: 907.474.1827 or Fax: 907.474.5688

SUPPORT SERVICES

Go to the Student Handbook (www.uaf.edu/handbook) for things like:
academic advising, tutoring, library and academic support, disability services, computing and technology, veteran and military support, academic complaint and appeals, late withdrawals, "classroom" behavior expectations and more.

UAF eCampus Student Services

Helps students with registration and course schedules, provides information about lessons and student records, assists with the examination process, and answers general questions. Our Academic Advisor can help students communicate with instructors, locate helpful resources, and maximize their distance learning experience. Contact the UAF eCampus Student Services staff at 907.455.2060 or toll free 1.800.277.8060 or contact staff directly with our directory listing**.**

UAF Help Desk

Go to http://www.alaska.edu/oit/ to see about current network outages and technology news. For technical questions, contact the Help Desk at:

- e-mail at helpdesk@alaska.edu
- phone: 907.450.8300 or 1.800.478.8226

Tutorial and academic support

Students who have difficulties with oral presentations, mathematics and/or writing are strongly encouraged to get help from:

- UAF Speaking Center (907.474.5470, speak@uaf.edu)
- UAF Writing Center (907.474.5314, Gruening 8th floor)
- UAF Math Services
- Debbie Moses Learning Center at CTC (907.455.2860) (604 Barnette St, 907.455.2860).