Instructors
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Logistics
Mondays; 1:30-3:00; Bren
Additional days will be scheduled to replace holidays

Overview
One of the unique aspects of Bren’s Ph.D. training is its emphasis on communication between and among disciplines. This class seeks to give you some preparation for this daunting challenge. We’ll review research and perspectives that seek to assess whether, why and how to engage in interdisciplinary research. Recognizing that interdisciplinary research skills are best learned through practice, much of the class will be directed towards developing a group research project. This synthesis will address some aspect of this natural science – social science intersection. Past classes have produced several published research papers (although this takes more time than the allocated 10 weeks).

Schedule
Week 1
Interdisciplinary skills
Discussion of readings on the risks and rewards of interdisciplinary research:

- Managing Earth’s Ecosystems: An interdisciplinary challenge, Daily and Ehrlich, 1999
- Interdisciplinary research has consistently lower funding success, Bronham et al., 2016

Research project
Robert and Dave introduce proposed research topic.
Students choose additional readings.

Week 2
Interdisciplinary skills
Discussion of readings on challenges and tools for successful interdisciplinary research

- Overcoming obstacles to interdisciplinary research, Campbell 2005
• Ten tips for interdisciplinary researchers: A guide for aspiring socio-ecological researchers and their mentors, Kelly et al., in review.

Research project
Discussion of chosen readings. Students select and assign topic areas for further review and synthesis for presentations during weeks 3-4.

Week 3 (to be rescheduled)
Interdisciplinary skills
Discussion of ways to communicate and understand across disciplines:
• Employing philosophical dialogue in collaborative science, Eigenbrode et al., 2007

Research project
Present initial literature reviews.

Week 4
Research project
Present initial literature reviews.

Week 5
Research project
Clarify research question. Develop framework to integrate literature reviews. Assign writing tasks.

Week 6
Research project
Workshop writing. Integrate into a single document.

Week 7 (to be rescheduled)
Research project
Review integrated document. Decide on schedule for the rest of the quarter.

Weeks 8-9
Research project
Continued analysis, writing and editing.

Week 10
Interdisciplinary skills
Reflection on interdisciplinary experience – what has worked for you?

Research project
Review current document. Plan for continued progress on paper.