

ESM 514: Collaborative interdisciplinary research

Instructor: Kelsey Jack

Winter 2023

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Monday 2:30-4pm, BH 1520

Office: Bren 4412

Office hours: after class

Overview

The Bren School seeks to train its PhD students for successful collaboration across disciplines. ESM 514 is designed to provide the opportunity to engage with the potential and challenges of cross- and multi-disciplinary research collaboration. In ESM 514, students will also engage with practical and strategic elements of conducting research. The class is organized around eight issues and challenges that arise during the research process, from formulating a question to forming a team of collaborators and fundraising to surviving the peer review process. Through activities, discussions and examples, the class will help demystify different stages of the research process and provide practical tools that will help students succeed in the transition from consumers to producers of knowledge.

Course materials and logistics

Course materials, including readings, homework assignments and notes and activities associated with in-class engagement will be shared via a [Google drive](#).

Structure: Each week will be structured around three common elements: (1) a clearly defined learning objective, (2) a short homework assignment that will feed into the in-class session and will be due by noon on Mondays before class, (3) in-class activities and discussions that provide an opportunity to learn from each other. The course will emphasize practical tips, tools and skills.

Readings: You will need to read to prepare your homework most weeks. Because of the broad research interests in the class, these required readings are not provided by the instructor; instead, students will be responsible for locating papers that best support their assignments. Please cite these papers and include links so that we can find them easily in class. In addition, a set of readings will be provided each week on the theme of the class meeting. They can also serve as a reference for you after the quarter is over. These will be organized in the Google drive according to the week of the term. In addition, a folder of general readings includes resources related to

multi- and cross-disciplinary research that can serve as reference throughout the course (and beyond). Students are encouraged to add to the shared set of readings by uploading pdfs or posting URLs to the drive.

[Google drive](#): Your use of the Google shared drive to stay organized, share materials, etc. is both a course tool and a collaboration tool. Title your shared content so that it is both concise and understandable to your collaborators. Discuss and adopt shared norms about file names, file paths, communication, etc.

Office hours: Prof Jack will stick around after class to answer questions, and discuss students' research interests. Other meeting times are available (and encouraged) by appointment.

Schedule

A detailed class schedule that includes both topics and deliverables is available in the team drive's main folder. The schedule is subject to updates as we move through the term. Each week will focus on a different topic, as follows:

Date	Week	Topic
Jan 9	1	Challenges and benefits of interdisciplinary research
Jan 16	–	MLK day, no class
Jan 23	2	Proposing and refining a research question/problem
Jan 30	3	Knowing the literature but not drowning in it
Feb 6	4	Pulling together a “dream team” of collaborators
Feb 13	5	Communication and collaboration tools
Feb 20	–	Presidents' day, no class
Feb 27	6	Proposal writing and funding
Mar 6	7	De-mystifying the peer review process
Mar 13	8	Presenting your research and being a good audience member

Deadlines and deliverables

You will have a short homework assignment most weeks. Most weeks, you will be asked to complete a short memo (1 pager) that will be used during the subsequent class meeting. The homeworks are designed to help you engage with the literature related to your research interests, in addition to thinking more deeply and reviewing applications of the topics we are covering in class. Weekly homework assignments should take you around 2 hours to complete each week, and you should use the memos as an opportunity to practice communicating your ideas succinctly and clearly, whether in bullet point or paragraph form. Each week, a combination of

volunteers and cold-calls will help inform the discussion, so come to class prepared to discuss the content of your memo (and have it shown to the rest of the class).

You will receive feedback on these assignments if they are falling below expectation or vastly exceeding expectation. I will not provide written feedback on each assignment -- if you would like more feedback, please sign up for office hours.

Your memos should be uploaded to the Google drive homework folder for the appropriate week (e.g., upload Week 2 on Monday Jan 24 before noon). Title your submissions Lastname_WeekX. Late homeworks are not accepted since they are used for the in-class discussion.

In addition to your weekly memos, you have two additional assignments that you will need to complete at some point during the term.

- 1) Interview a faculty member at UCSB
- 2) Memo on a seminar

Both of these individual memos can be submitted at any point during the term, but no later than the last day of classes (March 17). Additional guidelines for the memo can be found in the relevant folder on the Google team drive.

Expectations

Your grade in the course will be based on participation (50%) and your homeworks (50%). You will have ample opportunity for participation in class, and you will have no problem earning full participation points if you make comments, ask questions and show up to class.