

SD 332 Earth Systems

Winter 2014

Course Project

The requirements for SYDE 332 include a modest project, some sort of case study involving two or more of mathematics, modeling, earth science, monitoring / inverse problems, and policy.

Key requirements:

- The project may be done alone or in a group of two students
- SYDE 332 is a technical elective. The project must have a significant technical component, and cannot be purely qualitative or policy based.
- The project must be at least modestly interdisciplinary, in some way involving or examining the intersection of two or more topics (see nearly *any* of the case studies from class).
- The project is not a thesis. However 20% of the course grade for two students should represent a reasonable amount of effort.
- This is your own work; obviously cheating/plagiarism rules apply.

Key dates:

- February 14th: I need a one-page submission with your name(s), project title, and a brief summary (fewer than 100 words), and a few references. This submission is graded pass/fail.
- April 2, 4: Short presentation by each group. Focus on high-level / big-picture; avoid getting stuck in details.
Single-Person Project: Presentation no more than 5 minutes (7 minutes with questions)
Two-Person Project: Presentation no more than 10 minutes (15 minutes with questions).
- April 6: Project due. If you have a busy end of term, I would encourage you to hand the project in early.
Bonus: 1.5% added to project grade per week submitted early

This course has attracted students having a wide variety of interests, and the intent of this project is for students to have the opportunity to steer and shape the course towards their particular interest.

The project must have a technical component. This might take the form of real-data analysis, some sort of programming or implementation, a simulation, model development, or a survey of methods and models currently being used by researchers in the area.

The project must also have some sort of interdisciplinary component. However the project report should in no way be divided into discussion of discipline one, following by discussion of discipline two etc. I am looking for topics in which interdisciplinarity is *inherent* to the topic, so that the discussion of your topic needs to weave together material from more than one discipline.

It would be best to start early, in order to have time to consult with the course instructor.

The project report should be formal (title page, introduction, conclusions, references etc.). Marks are more readily given for insight and depth of discussion rather than the length of the report.