UC SANTA BARBARA
Bren School of Environmental Science & Management

EDS 411B: MEDS Capstone
Course Syllabus (Winter 2024)

Class
Wednesday 1 - 4, NCEAS classroom.

Instructor
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TA
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Course website
https://carmengg.github.io/eds-411-website/

EDS 411B Description
The goal of EDS 411B is to facilitate student learning, work and progress on their MEDS Capstone project through lessons, activities, supervised and unsupervised project work, and peer review and feedback. Additionally, EDS 411B provides opportunities for professional and career development (e.g. presentation skills, writing and editing, client relations, team science, panel discussions, and conflict resolution).

Throughout the course, students will build on skills they have learned in prior MEDS courses to implement them in a real-world data science project, including:

- **Prepare professional documentation for a data science project** through the Technical Documentation

- **Practice project management and reproducible workflows** using tools and strategies learned in MEDS courses, establishing clear expectations for group roles and participation, and with frequent updates within and across groups
- **Continue to build real-world skills for data science projects** through continued collaborative work in git, data analyses and statistics, data visualization and communication, and more
- **Implement professional skills for data science careers** including code and documentation peer review, team and client relations, scheduling and organizing tools & strategies, and conflict resolution & communication

A major goal of 411B is to facilitate and support student work on their Technical Documentation and Public Presentations. See Capstone Guidelines for more information.

Course expectations
EDS 411B meets for 3 hr/wk. The expected total project contribution of each group is 30 - 40 hours / wk (~10 - 12 hr / group member). Most work done on MEDS Capstone projects will be outside of EDS 411B. This course exists to provide opportunities for co-learning and sharing between groups, and designated time for learning & practicing skills that are important across all projects. Additional work & progress on Capstone projects should be expected based on weekly discussions with the faculty advisor and/or clients.

In order to encourage independent learning and problem-solving skills, we expect that the TA will only offer technical support for the implementation of the students' capstone projects during office hours. One of the main goals for the capstone project is to empower each team to take ownership over its work, so students should not be looking for answers that would simply give away the solution and should seek TA assistance only as needed. Students are the leaders in their capstone projects and have the ultimate responsibility in implementing it.

Course prerequisites (official): None

Required textbook / reader: None (readings will be assigned and posted)

Bring to class: All students should bring all materials and devices needed for work on their capstone project to class. Students should also bring a notebook and pens/pencils to each session.

Course materials
Materials are accessed through the course website.

Course communication
Course communication will be through Slack workspace and website.

Assignments
EDS 411 is a practicum-style course that prioritizes work and progress on MEDS Capstone projects, combined with short lectures, guest visits, and activities to reinforce data science, project management, and professional skills throughout. Course requirements will be related to Capstone milestones, and will be assessed based on in-class presentations, and group and individual self-assessments throughout the quarter.

Assessment and grading
Grades will be based on three components:
1. Course participation and project contributions (70%)
2. Weekly check-ins with groups and in-class presentations (20%)
3. Individual weekly task checklist & response (10%)

Access and accommodations
Please submit requests for accommodations often and early. It is never too late to apply for DSP accommodations. If you have any kind of disability, whether apparent or non-apparent, learning, emotional, physical, or cognitive you may be eligible to use formal accessibility services on campus. To arrange class-related accommodations, please contact DSP. DSP will initiate communication about accommodations with faculty. By making a plan through DSP, appropriate accommodations can be implemented without disclosing your specific condition or diagnosis to course instructors.

Code of conduct
We expect all course participants (including instructors, guests, and students) to be committed to actively creating, modeling, and maintaining an inclusive climate and supportive learning environment for all. We expect everyone to treat every member of our learning community with respect. Harassment of any kind will not be tolerated. Everyone is expected to read and adhere to the Bren School Code of Conduct and the UCSB Code of Conduct.

Weekly activities (subject to change)

Week Monday start date	Topic
Week 1	- Spring quarter deliverables overview

April 1	- Overview of Technical Documentation - Independent group work
Week 2 April 8	- Flash talks I - Independent group work
Week 3 April 15	- Independent group work **Technical documentation outline due on Friday**
Week 4 April 22	- Independent group work **One-on-one meetings with instructor**
Week 5 April 29	- Shiny App testing - Independent group work
Week 6 May 6	- Final presentations overview - Independent group work
Week 7 May 13	- Practice presentations I **Technical Documentation draft due on Monday**
Week 8 May 20	- Practice presentations II
Week 9 May 27	- Practice presentations III (at Bren 2-5 pm) **Final Presentations on Friday**
Week 10 June 3	- Wrap up **Submit Technical Documentation and Repository for signing on Monday** **All final deliverables due on Friday**
Finals Week June 10	No activities or deliverables

Student Resources

There are many on-campus resources for helping students navigate different challenges and grow community. I am available to discuss your individual needs and help guide you towards a campus resource that may be best suited to your situation. A number of those resources are listed, below:

Basic Needs Resources & Food Insecurity
UCSB has a dedicated team for helping students navigate and find help meeting basic needs. Explore the Basic Needs Resources web page for more information on their many resources, including information on the CalFresh Program and The Associated Students food bank.

Counseling and Psychological Services (CAPS)
As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. CAPS is available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus. They can be reached by phone at 805.893.4411, or online at http://caps.sa.ucsb.edu. The CAPS building is the pink building next to the Humanities and Social Science building (HSSB)

Resource Center for Sexual and Gender Diversity (RCSGD)
Located in the Student Resource Building (SRB), RCSGD offers a host of services for LGBTQ+ students, including a library andmany events throughout the year. Learn more at: https: //rcsgd.sa.ucsb.edu/

Undocumented Student Services (USS) Program
The USS Program and associated Dream Scholars Resource Team (DSRT) offer workshops, help students find scholarships and financial support, and work to provide a community for undocumented students. Learn more at: https://uss.sa.ucsb.edu/

Campus Learning Assistance Services (CLAS)
CLAS helps students grow academically by offering workshops, walk-in and pre-scheduled tutoring, and writing help both for native and non-native (ESL) English as a second language speakers. Over 50% of students will stop by CLAS at one time or another. http: //clas.sa.ucsb.edu

Student Resource Building (SRB)
The SRB houses many campus resources offices, including the African Diasporic Cultural resource Center, the American Indian Resource Center, the Asian Resource Center, the Middle Eastern Resource Center, the Non-Traditional and Re-Entry Student Resource Center.
http: //www.sa.ucsb.edu/student-resource-building/home

Multicultural Center (MCC)
The MCC, located in UCEN, hosts a wide variety of cultural events and educational programming throughout the year, including film showings, lectures, musical performances, and more: http://mcc.sa.ucsb.edu/

Campus Advocacy, Resources, & Education (CARE)

CARE offers 24/7 confidential support and advocacy in situations of sexual assault, dating and domestic violence, and stalking. Located in the SRB, they can be reached at 805.893.4613 or http://wgse.sa.ucsb.edu/care/home

Financial Crisis Response Team
If you are experiencing issues of housing insecurity contact the Financial Crisis Response Team at financialcrisis@sa.ucsb.edu to begin application for assistance.

Health and Wellness
Student well-being is integral to academic success, student development, and life satisfaction. On this website, students will find links to a range of services related to well-being such as: assistance with basic needs (food, housing, finances); counseling and physical health resources, daily wellness centers and programs; social connection, and personal safety. https://wellbeing.ucsb.edu/