**EES \_\_\_\_\_ Community Engaged Science**

Class: Tuesdays 1:10-4pm, SC5737

Dr. Lily Claiborne Dr. Jessica Oster

Office hours: Office Hours:

Email: Email: jessica.l.oster@vanderbilt.edu

**Learning Goals**

*This course is unique in that you will set some goals for yourself, along with the goals we will have for the group as a whole. Your focus in the course, both scientific and community engagement, should be tailored to meet the goals you set for yourself.*

* Academic
  + Master some aspect of science relevant to stream system health (water geochemistry, sediments, biodiversity, mapping, regulations, flooding)
  + Practice data management and visualization
  + Improve skills related to oral and written communication with diverse audiences
  + Cultivate an understanding of the challenges of addressing environmental problems in the real world
  + Enhance problem solving skills
* Civic Engagement
  + Critical Thinking regarding any of the following: differences in power and privilege, the structures, practices, and missions of community organizations, relationships between community organizations and the community itself, role of community in government and vice versa, regulatory practices of government regarding the environment, cultural competency
  + Respect
* Personal Growth
  + Critical thinking regarding any of the following: assumptions and expectations, successes and failures, personal characteristics that hinder or support your success, shifts in perspectives, moral and ethical development

**How you will be assessed**

This course will offer you an important opportunity to work with your EES colleagues to extend your experience beyond the Vanderbilt bubble, and we expect you to take full advantage of this. Opportunities to demonstrate your **participation and engagement (25%)** come through attendance, team-work, preparation for and participation in discussions, completion of data analysis, and communication with guests, team members, and stakeholders. This grade will come from guided self- and peer-evaluations, with feedback but not direct assessment from instructors.

Periodic **reflections (25%)** will also demonstrate this engagement, as well as your progress toward meeting the goals you identified for yourself at the start of the term and the goals of the course. Grades on these assignments will also come primarily from self-evaluation, with feedback but not direct assessment from instructors.

A **final project and presentation (40%)** of that work will serve as a final assessment of your mastery of the academic course goals, as will **periodic assignments intended to serve as milestones toward your final project (10%)**. Students will self-evaluate their milestone assignments, while instructors will assess the final projects.

You will regularly be asked to evaluate your own work and efforts and those of your peers as part of your assessment for the course. We reserve the right to change the grades you assign yourself, but if you justify it clearly and it reflects your work, the grades you assign yourself are unlikely to be changed.

We recognize that not every person excels at every aspect of this kind of work. We encourage you to find the way to use your skills and knowledge to make your best possible contributions to this endeavor.

**Absence and late policy**

We are holding class during an ongoing pandemic and will respect the possibility of vulnerabilities among our classroom community. **Do not come to class with symptoms of illness of any kind or with pending (or positive) COVID tests or exposures.** Having said that, it’s important to recognize that missing one session of a 3hr class is equivalent to a full week of class. We will do our best to accommodate absences with reasonable causes (illness, emergency) that we are made aware of in advance. Missing meetings with community partners and/or field trips will be problematic and may require students to arrange additional field or community visits. Chronic absences and/or lack of communication around absences will result in zeroes on assignments and participation credits.

**Policy on Electronics**

Electronic devices will be useful for many aspects of this class (laptops for work sessions, phones for photos/videos/quickly looking things up). However, when guests are in class, devices should be stowed away to allow for full and respectful engagement with our partners. We will aim to provide a recording of all guest sessions to allow for later note taking, etc. We reserve the right to revoke a student’s use of devices if this privilege is abused and becomes distracting.

**Communications**

We are committed to fostering an inclusive learning environment where diversity and individual differences are understood, respected, appreciated, and recognized as a source of strength. Our discussions in the classroom and in the field will be as inclusive as possible and structured by mutual respect, civility, and the ability to listen to others. We will also be engaging with members of the broader Nashville community throughout the semester both in our classroom and in their communities. It is essential that you treat every person with whom you interact with respect and empathy. Most importantly, it is essential that you listen and learn from every person we meet this semester.

Any student with particular needs should contact Student Access Services (<https://www.vanderbilt.edu/student-access/>) as soon as possible so that we can work together to accommodate these needs. If you experience anything in this course that negatively impacts your ability to succeed, please speak with your faculty and/or contact the Student Access Services for guidance. Be aware that we are required by law to report any suspicion of sexual assault, harassment, or discrimination to the University so that they may reach out to impacted students to support them.

**Semester Schedule**

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| **Date** | **Topic** | **Preparation** |
| 1/18 | Introduction to the course and to Mill Creek, goal setting   * Introductions * Intro to Mill Creek Project   + Lily overviews history and communities   + Jessica overviews science * Review course structure   + Introduction to ‘ungrading’   + Introduction of DEAL model for reflections * Goal setting activities | None |
| 1/25 | Engaging with Communities Ethically (guest speaker for part? Multi guest speakers? Case studies (Braiding Sweetgrass, Street Science, etc. and discussions?)   * Guest speaker: Faith \_\_\_\_\_ * Case Study Activities (application of Yolanda article) * Panel Prep (questions for background research and for panelists) | * Reading: “Listening” from Science Communication book. * Balazas and Morello-Frosch (2013) *The Three R’s: How Community Based Participatory Research Strengthens the Rigor, Relevance and Reach of Science.* * Discussion prompts/guiding questions |
| 2/1 | Mill Creek Panel– panel and working group discussions to help students hear what communities need and brainstorm projects   * Maybe on zoom * Panel first * Breakout smaller meeting to listend to community needs and brainstorm projects | Background research on panelist’s organizations.  Reading: writing a strong reflection  **Reflection 1:** Goals and Background |
| 2/8 | Site Visit 1 | Reading on mill creek and past data, prepare to share what you learned with the group in the field.  project ideas due  Reading: writing a project proposal |
| 2/15 | Project Proposal Workshops   * Sharing drafts * Peer review * Collaborative revision   Content Instruction Day 1 | Project Proposal Due with budget  **Reflection 2 due** |
| 2/22 | Content Instruction Day 2 | Revised Project Proposals due to community Partners  Content Reading |
| 3/1 | Site Visit 2 | TBA |
| 3/8 | **SPRING BREAK** |  |
| 3/15 | Content Instruction Day 3 (Guest, as Oster and Claiborne are out) | **Reflection 3**  Content Reading |
| 3/22 | Project/Data updates and assessment | Data Update |
| 3/29 | Site Visit 3 | TBA |
| 4/5 | TBA – depending on needs of projects | Project Work, progress report  Reading? |
| 4/12 | TBA – depending on needs of projects | Project work, progress report |
| 4/19 | TBA – depending on needs of projects | Project Work, progress report |
| 4/26 | Community Forum, final project presentations (onsite event may be scheduled at a time different from final class period) | **Final Reflection – self- evaluation of goals** |

* Not sure whether to list communication with community partners as assigned/due, but this should be fairly regular. Not sure how much we should control students’ communications with them, though. Should it all go through us?
* Site visits should definitely include stream, and maybe zoo
* Not sure how much formal interaction with partners during classtime is needed or is an option.
* Content instruction could be expanded. Does everyone get the same thing? Or do we split them into cohorts/groups based on topic and teach separately? We can perhaps lean on other folks for some of this teaching as well, I bet.
* Haven’t thought at all about how this class will differ for UG and Grad students. Maybe they do more learning on their own and presenting/teaching to the UG students? Maybe they have an assigned ‘mentor’ role of some kind, on which they have to set goals and reflect?