



CAT 124

Partnerships for Local Climate Action: The UCSD-EarthLab Community Station
WI24

Instructor	Amy Knight (a2knight@ucsd.edu) EarthLab Program Manager, UCSD Center on Global Justice
Seminar hours & location	Friday 1:00 - 3:50 PM in SME 402 (Structural Materials & Engineering)
Field site Location	UCSD-EarthLab (in Google Maps as MTM Earth Lab) 1110 Carolina Lane, San Diego, CA 92102 <i>~30 minute drive from UCSD, ~75 minutes on trolley (blue to orange line)</i>
Field site hours & schedule	Monday: 11AM - 3PM <i>Bending the Curve for Youth</i>
	Tuesday: 1PM - 5PM <i>SeaPerch Robotics Afterschool Program</i>
	Wednesday: 1PM - 5PM <i>SeaPerch Robotics Afterschool Program</i>
	Thursday: 1PM - 5PM <i>SeaPerch Robotics Afterschool Program</i>
Office Hours	Tuesdays 11:00 AM - 12:00 PM via Zoom (774 953 1472) or in person by appointment

Course Description

This experiential learning course is designed around applying an equity-driven, community-led approach to climate action. The course emphasizes youth-led climate action through the *EarthLab Method*, a set of design-based experiential learning practices. In the seminar, you will be introduced to these theories that guide the UCSD-EarthLab Community Station and draw on them as you engage in participatory field research with youth at the Community Station. This course aims to co-produce knowledge and resources with communities, moving away from an extractive model of research towards forming collaborative and mutually beneficial relationships with our participants and site partners at Groundwork San Diego-Chollas Creek and Millennial Tech Middle School.

While at the field site, you will be both a university representative and a youth mentor. **In this position, you will actively support middle school youth participation** and inform how to improve lesson plans developed from the EarthLab Method. As you directly support youth participation and action, you will observe and carefully document your own and others'



participation in EarthLab activities. These qualitative research skills will help you evaluate theories about what makes successful community-led climate action

Your engagement with youth and research will be an important contribution to ongoing projects at the UCSD-EarthLab Community Station/ UCSD Center on Global Justice. The aim of this course, thus, is to not only teach you how to ethically conduct social science field research, but also to do work that connects you and the University with the local community and the local community with the University.

Learning Outcomes

- Develop proficiency for engaging with youth as a mentor and making connections in an experiential learning environment.
- Develop qualitative research skills of observation, documentation, reflection, and analysis.
- Develop the skills to critically examine interactions between self, classmates, partners, participants, and community members.
- Understand and use the EarthLab Method as an analytical tool for assessing and improving activities and projects at EarthLab facilitated by the UCSD Community Station infrastructures.
- Strengthen research communication and facilitation skills both formal (presentation) and informal (in seminar with classmates, on site with youth participants).
- Become well-versed in issues of climate justice and equity at global, local, and site-specific scales.

UCSD-EarthLab Community Station

EarthLab is part of a network of public spaces in underserved neighborhoods on both sides of the border. The mission of the UCSD Community Stations is to foster relationships between the university and communities to facilitate collective, equity-focused climate action. This course is born from that mission, taking a distinctly social, community-based approach to climate action. Located in southeast San Diego County, the neighborhood of Encanto reflects the larger dynamic of the San Diego/Tijuana border region. This region is one of extremes, both in terms of climate and social inequity. In our seminar, we will consider the complex problem of climate change alongside a wide range of community-focused and initiated solutions. We will aim to understand climate justice as both a broad concept and within the specific context of our region.



Community Partners: Groundwork San Diego-Chollas Creek and Millennial Tech Middle School

This course builds on a long-term partnership between UCSD, Groundwork San Diego-Chollas Creek (GWSD) and Millennial Tech Middle School (MTM). GWSD strives to bring about the sustained regeneration, improvement and management of Chollas Creek through the development of community-based partnership which empower people, businesses and organizations to promote environmental, economic, and social well-being. EarthLab is located at MTM, a public school that serves students from the community of Encanto, a historically redlined community where 60% of the student body are emergent English language learners and more than half come from households with income below the federal poverty line. MTM supports its diverse student body by nurturing student curiosity and environmental advocacy both inside the classroom and at EarthLab. Your work at EarthLab as a researcher and youth mentor will contribute directly to this goal.

EarthLab Programming

The design of programming at EarthLab this Fall has been led by GWSD and supported by the UCSD Center on Global Justice. As a part of this class, you will take part in one of the following:

Bending the Curve for Youth (Monday field day)

This program is a year-long pilot curriculum meant to adapt the 2015 UC climate solutions report [Bending the Curve](#) to a series of activities and projects for youth based on the EarthLab Method. Participants work from a companion journal to record their observations, thoughts, and artwork aligned to the activities for each day.

Monday Schedule for UCSD Mentors

Time	Activity
11:00 AM	UCSD Mentors arrive at MTM (Room 205)
11:00 - 11:10	UCSD Mentors report to their assigned classroom for BtC
11:10 - 12:11 / 61 min	Students Arrive / SEL Period 4
12:11 - 12:51 / 40 min.	Lunch
12:51 - 1:48 / 57 min.	Period 5
1:48 - 2:49 / 61 min.	Period 6
2:49 - 3:00 / 11 min.	UCSD Mentors Debrief with Amy or GWSD staff



After School Program (Tuesday - Thursday field days)

This quarter's theme is about deep sea exploration. Participants will build, engineer, and test an underwater remote operated vehicle (ROV) as part of the SeaPerch competition. Upon completion of the program, students will have acquired an understanding of marine ecosystems and engineering principles and will be prepared to participate in the [SeaPerch ROV competition](#) on April 4, 2024.

Tuesday - Thursday Schedule for UCSD Mentors

Time	Activity
1:00	UCSD Mentors arrive at MTM (Room 205)
1:00 - 2:50 / 110 min	UCSD Mentors review lesson plan and assist Javier or Kyra with set up for the day
2:50-3:00 / 5 min.	Students Arrive: Question of the Day & Snacks
3:00-3:10 / 10 min.	Creating a checklist what to do (what do they want to focus on that day)
3:10-4:15 / 65 min.	Work on the stuffs
4:15-4:30 / 25 min.	Clean Up/ Student Drop Off



Assignment/Grade Breakdown

(30%) Attendance & Field Site Engagement

- *Seminar attendance and discussion:* You are expected to come to the seminar having read the text(s) (which can be found on Canvas) and be ready to discuss. In the seminar we will also discuss experiences from the site, analyze field notes (see “field notes” below), and reflect upon lesson design. Prompt arrival is critical for making the most of seminar time (see “attendance” below).
- *Canvas Workspace Assignments (CWA):* Most weeks, your reading assignments will include a short assignment posted to Canvas, due Thursdays at 11:59pm. The reflections will be graded for completion and serve as facilitation tools for the discussion lead (see “discussion lead” below).
- *Discussion lead:* You will be responsible for leading the class in a discussion about one of the week’s readings. We will assign weeks and go over expectations for leading discussion on the first day of the seminar.
- *Field site visits:* During site visits your priority is to engage with community partners and youth participants. This will look different each day, as activity materials, setup, and participant and instructor needs will vary. NOTE: repeated lack of engagement at the field site (sitting on phone, not engaging with youth) will not only impact your grade – it impacts our relationship with GWSD. See “field site engagement policy” for more details.

(30%) Field notes (for uploading directions, see “media and field note upload procedures” below)

- This course forms an integral part of implementing and evaluating programming at the EarthLab Community Station. EarthLab brings together a wide variety of people and organizations from the university and local community. As a student in this course, you are now part of this research collaborative both as researcher and participant. The field notes you write are data critical to this research project. They are one of the primary sources of information used by the UCSD Center on Global Justice to study effective means of co-production with community partners.
- Every time you are at site, you are required to write a field note that documents your *participative experiences, engagement* and the *progress on your learning goals* throughout the quarter. See “field note writing guide” in Canvas for guidelines on how to write your field notes.



(40%) Final Research Portfolio & Final Conference

- *Final Research Portfolio:* By the end of the quarter, you will assemble a research portfolio project that draws upon your field notes as original qualitative data and creatively produce a contribution to programming at EarthLab. The final project will be due 24H before your scheduled final conference. More information will be given during the quarter.
- *Final Reflection:* You will write a 2-3 page paper (double-spaced) in which you reflect on your progress on learning goals since the start of the quarter. The reflection will serve both as a tool for synthesizing your and reflecting your learning this quarter, and as preparatory material for your final conference with me. This reflection will be due 24H before your scheduled final conference. More information will be given during the quarter.
- *Final Conference:* Instead of taking a final, you will meet with me 1:1 for a 20-minute conference. During this conference, we will discuss your final reflection paper and the progress you have made on your learning goals. At the end of the conference, we will agree on your final grade as a way to close out the course. Missing the conference will result in the loss of half a letter grade (e.g. from A to A-).

Logistics

Carpools will be set up in the beginning of the quarter. The field site is also accessible via the UC San Diego Blue Line Trolley.

Email & Text Communication Guidelines

I use email to communicate with the class about assignments, updates, etc. For questions, appointments, or anything related to the course, please email me. I will do my best to get back to you promptly, within 24 hours. (I do not check email over the weekend.). For a time-sensitive request or update, you may text or call. For example, if you are locked in at the field site or need to notify me that you are running late. A text about coursework that could be answered via email is not considered an appropriate use of contact via cell phone. If texting, please include your name. My number is in my email signature, and I will share it on the first day of class.



COURSE SCHEDULE

	Sequence in field	Thursday Seminar	Readings & Assignments
Week 1 (1/8 - 1/12)	No field visits this week <i>Introduce</i>	1/12 Topic: <i>Introduction to the field site</i>	Readings: none
			Assignments: [in class] CWA #1: Your Goals
Week 2 (1/15 - 1/19)	No field visits this week	1/19 Topic: <i>Ethical Engagement with Youth</i> Discussion Lead: Carson	Readings: Christensen, Pia Hardrup. 2004. <i>Children’s Participation in Ethnographic Research: Issues of Power and Representation.</i>
			Assignments: CWA #2 due Thursday
Week 3 (1/22 - 1/26)	<i>Supporting Youth Participation</i>	1/26 Topic: <i>Mentoring Middle School Youth</i> Discussion Lead: Livia In class: Trauma-informed mentoring (Amy)	Readings: Caskey & Anafara. 2007. <i>Developmental Characteristics of Young Adolescents.</i> “Recovering from the pandemic” article
			Assignments: CWA #3 due Thursday Field notes #1 due 24H after visit
Week 4 (1/29 - 2/2)	<i>Supporting Youth Participation</i>	2/2 Topic: <i>Environmental and Climate Justice in California</i> Discussion Lead:	Readings: Connolly, Michael. 2006. <i>Environmental Justice and Border Tribes: The Case of San Diego County.</i> Crosscutting Issues: Climate Change Impacts Across California (report). 2022



		Levi In class: Research Memo #1	Assignments: CWA #4 due Field notes #2 due
Week 5 (2/5 - 2/9)	<i>Supporting Youth Participation</i>	2/9 Topic: <i>How Can We Advance Equitable Climate Solutions?</i> Discussion Lead: Yingxi In class: Native Plants Scavenger hunt	Readings: Podcast: Is your carbon footprint BS? <i>Recommended: Zine, Hoodwinked in the Hothouse. Third Edition</i>
			Assignments: CWA #5 due Field notes #3 due
Week 6 (2/12 - 2/16)	<i>Supporting Youth Participation</i>	2/16 Topic: <i>Youth Agency</i> Discussion Lead: Candy & Anj	Reading: Akwom et al. 2016. <i>Youth Participatory Action Research (YPAR) 2.0: how technological innovation and digital organizing sparked a food revolution in East Oakland</i> Climate & Mind: What is Climate Grief
			Assignments: CWA #6 due CWA #7: Mid-term check in due Field notes #4 due
Week 7 (2/19 - 2/23)	<i>No class</i>		
Week 8 (2/26 - 3/1)	<i>Supporting Youth Participation</i> <i>No Monday field day - alternate</i>	2/23 Topic: <i>Why Storytelling Matters</i> Discussion Lead: Lindsey	Readings: Rappaport, Julian. 1995. <i>Empowerment Meets Narrative: Listening to Stories and Creating Settings</i> Robin Wall Kimmerer: <i>SkyWoman Falling</i>



	<i>assignment will be given</i>	In class: Developing a research question	Assignments: CWA #8 Field notes #5 due
Week 9 (3/4 - 3/8)	<i>Supporting Youth Participation</i>	3/1 Topic: <i>Imagining Just Climate Futures</i> Discussion Lead: Serwaa In class:	Readings: Common Worlds Research Collective. (2020). Learning to become with the world: Education for future survival [Paper commissioned for the UNESCO Futures of Education report]. UNESCO. Recommended: Brault, Claire. 2017. "Feminist Imaginations in a Heated Climate: Parody, Idiocy, and Climatological Possibilities." <i>Catalyst: Feminism, Theory, Technoscience</i> 3 (2).
			Assignments: CWA #9 Field notes #6 due
Week 10 (3/11 - 3/15)	<i>Analyze, Reflect & Celebrate!</i>	3/15 Topic: <i>The Meaning of Our Work</i> Discussion Lead: Jillian In class: Potluck and slideshow	Assignment: CWA #12 Field notes #9 due
Finals week (3/18 - 3/22)	<i>Process</i> No field days this week	Final Conferences with Amy (to be scheduled individually)	Assignment: Project and Final reflection due 24H before final conference



COURSE POLICIES & EXPECTATIONS

Field Site Absence Policy

Because you know your field day schedule in advance, the expectation is that you will not miss a day due to a planned vacation. However, life happens, so there are options for making up a missed field day. The first option is to reschedule for another day during the week. The other is to complete a field note analysis assignment, to be provided by the instructor. Field site attendance is critical to success in this course, so a **maximum of three absences** is allowed to receive a passing grade.

Field Site Dress Code

Because our work at EarthLab is at a school and outdoors, extra attention should be paid to attire on site. Mentors will be expected to adhere to the [MTM dress code](#) and model its intention that appropriate dress and grooming contribute to a productive learning environment. While the students are required to wear uniforms and you are not, please note that the following attire is not permissible on site: cropped tops, short shorts, and any piece of clothing with inappropriate words or pictures. This policy extends to anything you bring to the field site (i.e. stickers on water bottles). The EarthLab is also an outdoor environment, so you will be expected to wear close toed shoes. Also come prepared to get a little dirty, as outdoor education necessarily involves working with dusty or wet materials. If you have any questions about a particular item or difficulties accessing field site-appropriate attire, please contact your instructor or field site lead.

Field Site Engagement Policy

Field visits are a central component of this class. But engagement with youth is not only part of your grade – it is an essential function of our relationship with the community partners. The expectation is that with support from me, your engagement skills will progress over time. If you are not interested in working with youth, must be frequently asked to stay off your phone, or are otherwise detracting from youth participation at the field site, this course is not the best fit for you. There is no “low grade” threshold for failing to represent UCSD at the field site in a positive light. If after an initial conversation with me your actions are consistently detracting from the community we have built at EarthLab, I will advance to discussing withdrawal options.

Social Media & Contact Information

In your capacity as a mentor, it is important that youth feel comfortable being themselves around you. However, sometimes this comfort can cross the line into testing personal and social boundaries. Due to the large age difference between you and the youth and the power imbalance that creates, **we do not allow social media handles or contact information** to be shared between UCSD mentors and youth.

Similarly, we do not permit mentors to give money to participants. If one of them asks, you can let them know that your supervisor will not allow it.



Media Policy (Photos and Videos)

An important part of your work at EarthLab is recording participant engagement with activities, and is considered part of your engagement at the field site. All participants in the EarthLab after school program have signed media releases, so you are able and encouraged to take photos of and with participants on site. Photos will be uploaded to Google Drive.

Field Note and Media Uploading Procedures (Google Drive)

Field notes:

1. Upload your field note (AS A GOOGLE DOC) within 24 hrs of your visit. *All late entries lose 20% per day late. After two days late submission, your field note will not be accepted.*
2. Put your name and date of the site visit at the top of the page
3. Save your document as: lastname_wk_site visit day_date (ex: Knight_wk1_MON_04.10.23)
4. Each weekly field note should be ~4 pages, double spaced.
5. Upload to CAT 124 EL Google Drive
6. Folder path: "CAT124_EL_FA23" → "Field notes" → week of site visit



Media:

1. Media uploads are due with field note uploads.
2. If you have an iphone, first convert from .HEIC to .JPEG
3. Rename image file as: description_date (ex: participants planting milkweed_07.24.22)
4. Folder path: "CAT124_EL_FA23" → "media" → week of site visit

Assignment Submission and Late Work

I am understanding and flexible with most late submissions if communication is early and open. However, because we are working closely with each other and community partners, some deadlines do need to be firm. This is to ensure not only that we produce quality work in time for the EarthLab Showcase, but also that trust and reciprocity is maintained in our relationship with GWSD and MTM. This is especially true for deadlines associated with the EarthLab activity and showcase exhibit. A pattern of late submissions will result in a conversation about how it is affecting your engagement in class, your peers, and therefore your grade.

Attendance

Regular, prompt attendance at both the field site and seminar are critical to your success in the course. It is also key to maintaining a healthy partnership with GWSD and MTM. That is why it is



important to communicate early and often. If you know ahead of time that you will be absent, the expectation is that you will let me know. A notification via email will usually suffice. This is especially important for field days, as I need to know if more support is needed on site.

Accommodations will be made for absences related to illness, bereavement, family emergencies or care responsibilities and will not affect your grade. **Missing two or more classes** without this type of communication will result in a conversation about how your absence is affecting your engagement in class, and therefore your grade. Similarly, I will check in **after two late arrivals**. If late arrival becomes a pattern, we will have a conversation about how tardiness is affecting your engagement in seminar and at the field site, and therefore your grade.

Acceptable and Unacceptable Use of AI

The use of generative AI tools (e.g. ChatGPT, Dall-e, etc.) is permitted in this course for the following activities:

- Brainstorming and refining your ideas;
- Fine tuning your research questions;
- Finding information on your topic;
- Drafting an outline to organize your thoughts; and
- Checking grammar and style.

The use of generative AI tools is *not permitted* in this course for the following activities:

- Impersonating you in classroom contexts, such as by using the tool to compose discussion board prompts assigned to you or content that you put into a Zoom chat.
- Completing group work that your group has assigned to you, unless it is mutually agreed upon that you may utilize the tool.
- Writing a draft of a writing assignment.
- Writing entire sentences, paragraphs or papers to complete class assignments.

You are responsible for the information you submit based on an AI query (for instance, that it does not violate intellectual property laws, or contain misinformation or unethical content). Your use of AI tools must be properly documented and cited in order to stay within university policies on academic honesty. Any assignment that is found to have used generative AI tools in unauthorized ways will not be considered complete, and therefore be at risk for a failing grade. When in doubt about permitted usage, please ask for clarification.

Academic Integrity

Intellectual honesty is vital to an academic community and for my fair evaluation of your work. UCSD has a university-wide Policy on Integrity of Scholarship, published annually in the General Catalog, and online <https://academicintegrity.ucsd.edu/>. All students must read and be familiar with this Policy. All suspected violations of academic integrity will be reported to UCSD's Academic Integrity Coordinator. Students found to have violated UCSD's standards for academic



integrity may include suspension or dismissal, and academic sanctions may include failure of the assignment or failure of the course.

Covid Policy

We follow both the UC San Diego and the San Diego Unified School District [policy](#), which states that you must stay home until you get a negative test, or 5 days (whichever comes first).

Masking for 5 days after this time period is encouraged.

Communication

In CAT, it is our hope that in this course we will develop a supportive learning community that fosters discussion, engagement, and excitement. Often, we will engage in the course material through the sharing of ideas, questions, and personal experiences. “Honesty, listening for understanding, a willingness to share your ideas, and respect for self and others” are basic guidelines that can help create a positive learning environment. Your participation and feedback are important to the success of the course and I welcome your thoughts throughout the term on how we might improve class processes that will encourage effective communication and dialogue.

Statement of Inclusion:

I believe very strongly that the classroom and the community-based field site is a place to expand our knowledge and experiences safely, while being respected and valued. I support the values of UC San Diego to “create a diverse, equitable, and inclusive campus in which students, faculty, and staff can thrive”. I strive to uphold the values articulated by the Office of the [Vice Chancellor for Diversity, Equity, and Inclusion](#): “We believe that true excellence is achieved through productive relationships among people of diverse perspectives. When the collective talents of our students, faculty, and staff at UC San Diego are united in an environment that is open and inclusive, creativity and innovation prosper.” I hope you will join me in creating a class that upholds these values to further enhance our learning as a community.

For more information, <https://commons.ucsd.edu/files/Inclusion-Statements-Handout-4.pdf>.

And <http://diversity.ucsd.edu>.

Discrimination and Harassment

Please see Canvas for [UCSD’s Principles of Community](#) for a description of your campus’s commitments.

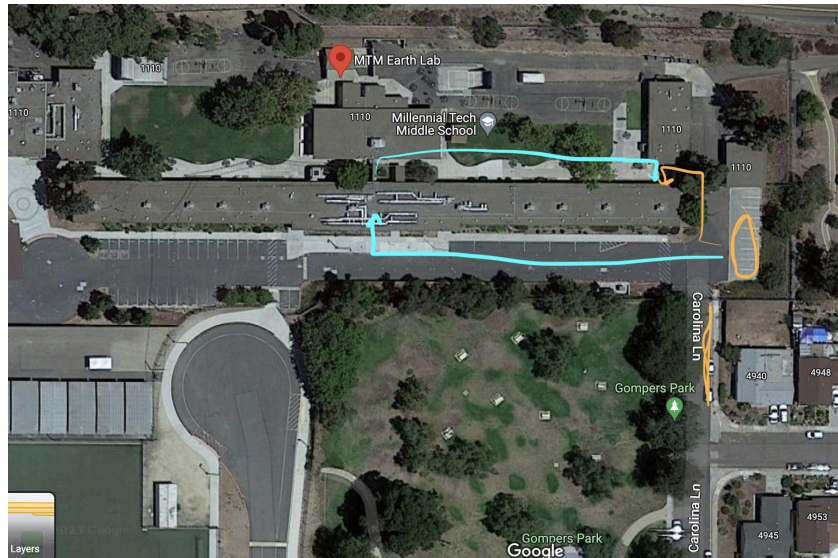
Students with Disabilities

Office for Students with Disabilities: <https://disabilities.ucsd.edu/>- 858-534-4382



How to get to EarthLab

Directions: The orange arrow points to the location of the EarthLab classroom. If the side gate is locked, text or call the EarthLab phone at 619-818-0275. You can also access the classroom by following the blue arrow, which will take you to the main office. Parking is available on Carolina Lane or in the staff parking lot circled in orange.





APPENDIX A: [Field Note Writing Guide](#)



APPENDIX B: EarthLab Master Plan





1 Environmental Sustainability Makers Lab



2 Energy Garden



3 Hydroponics Station

