

Department of Earth Sciences

University of Connecticut

DIVERSITY, EQUITY, AND INCLUSION HANDBOOK

Compiled by the DEI Committee, Spring 2022

About this document

Geoscience remains the least ethnically diverse of the STEM fields (NSF report, 2017). Over the past 20 years, the proportion of undergraduate geoscience degree recipients in the US from marginalized groups has more than doubled, from 10% to 24%. However, this progress is uneven, concentrated at a handful of universities located mainly in the southern US (Beane et al., 2021). Roughly 40% of geoscience programs fail to graduate more than one student from an underrepresented group per year, including the program at UConn. At the same time, the proportion of PhD recipients from marginalized groups has remained stagnant (Bernard and Cooperdock, 2018), indicating that gains at the undergraduate level are not translating to more PhD recipients from marginalized groups. On average, 350 PhDs in the geosciences are awarded each year in the US. Of these, less 15%, on average, are earned by underrepresented minorities, with numbers dipping to below 6% in some years.

The BLM movement in the summer of 2020 ignited renewed conversations about DEI in the geosciences, in particular within college and university programs. Prominent BIPOC geoscientists coordinated efforts designed to challenge the way we approach such issues, noting that more than 20 years of bringing in people from certain groups for special events or programs has not solved the diversity program in the geosciences (Morris et al., 2020). Instead, ensuring broad access and support for inclusive participation in the geosciences requires understanding of the effects of racism on participation and retention and the development of anti-racist policies and strategies for colleges and universities (Duran et al., 2021).

The faculty of the Department of Earth Sciences faculty recognize that our department is significantly underrepresented in groups that have historically been minoritized and marginalized in STEM. With our DEI committee taking the lead, the department is embarking on an effort to examine our culture and develop anti-racist policies to ensure that we are providing the sort of academic environment needed to ensure broad access and support for inclusive participation in our field. In this regard, this document summarizes policies, procedures, and best practices adopted by the department in an effort to ensure inclusivity and broad participation. It also includes demographic data for the department, along with an asset map of local resources.

This handbook provides a snapshot of our current culture. Importantly, it is a living document, which will be reviewed annually by the department's DEI committee and updated as needed to refine existing practices or incorporate new ones.

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Table of Contents

Mission Statement of the Department of Earth Sciences.....	4
Statement on Diversity, Equity, and Inclusion.....	5
University and Department Demographics	6
Complaints and Reporting Policies	7
Hiring and Admissions Policies and Procedures.....	9
Safety and Conduct Expectations.....	12
Resource Map.....	20

MISSION STATEMENT OF THE DEPARTMENT OF EARTH SCIENCES

Collectively, the Earth Sciences are a STEM discipline that examines the whole Earth as a unified natural system that exchanges solid, liquid, gaseous, organic, and human components. Earth science expertise provides the context --in time and space-- for meeting the economic, environmental, health, and safety, and other global challenges of our time, now that humans have become the dominant geologic agency operating on the planetary surface during the Anthropocene Epoch.

The mission of the Department of Earth Sciences is to provide quality instructional programs and research opportunities at the graduate and undergraduate levels, and to support scientific research and scholarly engagement that advances our understanding of earth system processes and makes that understanding useful to society.

STATEMENT ON DIVERSITY, EQUITY, AND INCLUSION

The UConn Department of Earth Sciences values diversity, prioritizes inclusion, and strives for justice and equity within our community and beyond. We embrace diversity in all forms and have zero tolerance for any form of discrimination or harassment. We believe that the best science arises from the integration of diverse ideas and experiences. Therefore, promoting and fostering diversity of all types is important to us.

We recognize that the Geosciences, including our community at UConn, is significantly underrepresented in groups that have historically been minoritized and marginalized in STEM. We are committed to the ongoing work of ensuring a positive, inclusive work environment and working toward broad access and support for inclusive participation in the Geosciences.

The Department of Geosciences Diversity Equity and Inclusion Committee works closely with [DEI Initiatives](#) in the College of Liberal Arts and Sciences and the [Office for Diversity and Inclusion](#) at UConn in efforts aimed at broadening justice, equity, diversity, and inclusion.

Land Acknowledgement Statement

We would like to begin by acknowledging that the land on which we gather is the territory of the Mohegan, Mashantucket Pequot, Eastern Pequot, Schaghticoke, Golden Hill Paugussett, Nipmuc, and Lenape Peoples, who have stewarded this land throughout the generations. We thank them for their strength and resilience in protecting this land, and aspire to uphold our responsibilities according to their example. [Learn more about UConn land acknowledgement.](#)

UNIVERSITY AND DEPARTMENT DEMOGRAPHICS

Demographic data for UConn are collected and published by the UConn Office of Institutional Research (<https://oire.uconn.edu/data/>). Compilations of diversity trends and statistics are available at <https://oire.uconn.edu/data/diversity/>. The most recent available data are discussed below.

In fall 2020, the **Storrs Campus undergraduate enrollment** was 18,658 students. Of this population, 51.2% were women, 13.3% were Hispanic/Latino, American Indian, Alaska Native, or Pacific Islander, 6.7% were Black or African American, and 11.2% were Asian. The demographic makeup of **undergraduates in the College of Liberal Arts and Sciences** that same year was 55.5% women, 14.8% Hispanic/Latino, American Indian, Alaska Native, or Pacific Islander, 8.9% Black or African American, and 11.1% were Asian. In addition, 3.6% self-identified as multiracial. These totals do not include international students, who made up nearly 10% of the student population. The full dataset is available at https://oire.uconn.edu/wp-content/uploads/sites/35/2020/12/ethbysch20_UG.pdf.

In fall 2020, **graduate enrollment in the College of Liberal Arts and Sciences** was 1702 students. Of these, 54.4% were women, 7.1% were Hispanic/Latino, 3.6% were Black or African American, and 3.8% were Asian. These data do not include the ethnicity of international students, who made up nearly a third of the graduate student population in the college. The full dataset is available at https://oire.uconn.edu/wp-content/uploads/sites/35/2020/12/ethbysch20_GR.pdf.

No public data are available for **UConn faculty and staff**.

Data from the US Census Bureau indicate that in 2021, the **population of Connecticut** was 3.6 million. Of this population, 51.2% were women, 16.9% were Hispanic/Latino, 0.6% were American Indian, Alaska Native, or Pacific Islander, 12.2% were Black or African American, and 5% were Asian. Multiracial ethnicity was declared by 2.5% of residents.

Within the geosciences, data from 2019 indicate that people from minoritized groups earned 15.7% of Bachelor's degrees, 10% of Master's degrees, and 6.7% of PhDs in the United States. A full dataset is available at <https://www.americangeosciences.org/geoscience-currents/diversity-geosciences>.

During the the 2021-22 academic year, the proportion of the population in **Department of Earth Sciences** from minoritized groups was as indicated below. These totals take into account the ethnicity of international students and faculty.

- Undergraduate majors - 23.7% (vs. 35.4% on Storrs Campus)
- MS Students – 20% (vs. 21.8% of all graduate students on Storrs Campus)
- PhD students – 40% (vs. 21.8% of all graduate students on Storrs Campus)
- Faculty – 10.5%

COMPLAINTS AND REPORTING POLICIES

Links to policies at UConn

The entire University community has a shared responsibility to promote affirmative action and provide equal opportunity in order to ensure non-discriminatory work and learning environments.

The **Office of Institutional Equity** (<https://equity.uconn.edu/>) ensures the UConn's commitment and responsibility to foster equitable and inclusive working and learning environments. Their work focuses on administering the University's non-discrimination policies, as well as ensuring compliance with state and federal laws and regulations related to equal opportunity and affirmative action, including but not limited to the Americans with Disabilities Act (ADA), Title IX of the Education Amendments Act of 1972, Title VI and Title VII of the Civil Rights Act of 1964, and the Connecticut Fair Employment Practices Act. This includes OIE serving as the office of the ADA Coordinator and Title IX Coordinator.

Links to all **university-wide policies, procedures, and guidelines** are available at <https://equity.uconn.edu/policiesprocedures/>.

UConn's **Policy Against Discrimination, Harassment, and Related Interpersonal Violence** may be accessed at the following link: <https://policy.uconn.edu/2015/12/29/policy-against-discrimination-harassment-and-related-interpersonal-violence/>.

- All incidents concerning alleged Prohibited Conduct pursuant to this policy may be reported at <https://equity.uconn.edu/reporting-form/>.

Students may report **bias-related incidents** to the Dean of Students Office, either in person or online at <https://dos.uconn.edu/bias-reporting-2/>. Bias-related incidents are those that negatively target, intimidate, or threaten an individual or group due to race, ethnicity, ancestry, national origin, religion, gender, sexual orientation, gender identity or expression, age, physical, mental, and intellectual disabilities, as well as past/present history of mental disorders. This includes, but is not limited to, graffiti or images that harass or intimidate individuals or groups due to the above characteristics. Faculty should report such incidents to the Office of Institutional Equity.

For disputes between faculty and students related to coursework or research, an attempt should be made to work out differences. If the dispute cannot be resolved between the parties, the complaint can be brought to the Department Head. Other university resources include the [UConn Ombudsman](#), the [Grade Appeal Procedure](#) described in the Undergraduate Bulletin, and the [Complaint, Appeal, and Hearing Procedures](#) provided in the Graduate Catalog.

Reporting policies are reviewed by UConn on an annual basis. The university also publishes an annual security report, the **Clery Report**, at <https://universitiesafety.uconn.edu/police/clery/clery-annual-security-report/>.

Mechanisms, contacts, and procedures

A complete list of incident types and how to report them is available at <https://equity.uconn.edu/discrimination/>. Incidents range from academic integrity, to bias, crime, hazing and more concerning issues.

In-person and online reports may be viewed by any of the following offices: Dean of Students Office, UConn Police Department or the State Police (depending on the nature of the incident), Community Standards, Graduate Student & Postdoctoral Affairs (The Graduate School), Office of Institutional Equity, Office for Diversity and Inclusion, and the Assistant Vice President for Student Affairs (AVPSA), via other relevant staff members. Incidents may also be reported to Residential Life, Cultural Centers, or student organization advisors. Reports are tracked by OIE or the Dean of Students Office.

Each report is reviewed individually and managed on a case-by-case basis. Interim actions may be taken, as appropriate (e.g., temporary residential relocation, no contact orders, etc.).

The final outcomes and/or consequences may include the following:

- Identify and provide support to impacted parties,
- Review incident to determine possible violations of the law, university policy, and/or student code of conduct,
- Determine action steps to educate the impacted community and work to repair harm,
- Follow-up by supervisor, training (bias, etc.), disciplinary action, or termination of employment of the reported person.

Resources for individuals reporting

The university provides resources for the individual who reports an incident. These may include:

- Counselors or advocates, especially those of the same race, ethnicity, and gender.
- Automatic or requested investigation of potential impact on grades or evaluations.
- Protection against retaliation or repercussions, accommodations for continuing work/courses, option for pass/fail or outside assessment.

The **UConn Ombuds Office** (<https://ombuds.uconn.edu/>) can be contacted at any point during an issue when a confidential conversation or source of information may be needed. The Ombuds will listen to your concerns, give you information about University policies, help you evaluate your situation, and assist you in making plans to address the issue or conflict.

HIRING AND ADMISSIONS POLICIES AND PROCEDURES

This section describes current practices at UConn and in the Department of Earth Sciences.

Advertising

UConn requires that all job advertisements state the following: *“At the University of Connecticut, our commitment to excellence is complemented by our commitment to building a culturally diverse community. We actively encourage women, people with disabilities, and members of minority groups to apply. The University of Connecticut is an EEO/AA employer.”*

The UConn Human Resources site states that *“The University of Connecticut is an AA/EEO Employer, and encourages applications from women, veterans, people with disabilities and members of traditionally underrepresented populations.”* This statement is followed by a list of related UConn policies that must be disclosed during the recruiting and hiring process. The list is available at <https://hr.uconn.edu/jobs/#required>.

In terms of ad placement for faculty and postdoc hiring, the UConn Office of Institutional Equity states: *“There is no required number of recruitment sources; however, search committees must demonstrate a good faith effort to recruit the position as broadly as possible. Standard University recruiting includes, Inside Higher Education, the Higher Education Recruitment Consortium (HERC), and Diverse. Search committees must still demonstrate they have gone beyond this standard recruiting to target diverse applicant pools specific to the position. The HR advertising coordinator may assist in this process; however, the overall recruitment strategy is ultimately the responsibility of the search committee.”*

For graduate admissions, the only place the program as a whole is publicly advertised is on our department website (<https://geosciences.uconn.edu/graduateprogram/>) and when we host a booth at the Annual Meeting of the Geological Society of America (GSA). The booth at GSA is designed to showcase the program, distribute information and allow prospective students to sign up to receive more information from specific advisors and for reminders about applying. A subset of faculty and current students in the program are typically available at the booth to answer questions. Aside from these broader advertisements for the program, individual faculty often email their professional contacts or post specific advertisements for RA opportunities and graduate openings in their research groups on social media or to email lists specific to their sub-field.

Application Requirements

For **faculty**, applications generally include a cover letter outlining suitability for the job, a CV, separate statements on teaching, research, and DEI, and the names and contact information for at least three professional references.

For **graduate admissions**, all application materials for graduate studies are submitted directly to the UConn Graduate School. Applications consist of a formal application form, together with the application fee, transcripts from undergraduate and graduate institutions attended, three letters of reference, Language Proficiency scores if necessary, and a personal essay. The essay is expected to include a student’s reasons for undertaking graduate study, how that study fits into their short-range and long-range goals, and what specific research areas they would like to undertake as a graduate student.

The department no longer requires the GRE, as it was deemed a potential barrier. The application fee (\$75) has also been recognized as a potential barrier. At the graduate school level, the application fee can be waived for prospective students associated with a variety of different organizations and partnerships (<https://grad.uconn.edu/admissions/application-fee-waivers/>). Individual departments may also decide to pay the application fee for individual applicants based on their own criteria, provided that all students meeting the criterion are given the waiver if it is requested. Currently, the EARTH department does not accept such requests.

Evaluation of Applicants

For hiring of **faculty and postdocs**, the evaluation process follows a set of guidelines and best practices provided during required search committee training. Resources are provided on the website of the Office of Institutional Equity (<https://equity.uconn.edu/search-process/faqs/#rec6>).

For **graduate admissions**, the current process is holistic. There is no set rubric. The process is not public. And currently we do not remove applicant names. Here's an overview:

1. Applicants must meet minimum GPA standards imposed by the Graduate School.
2. The graduate committee reviews all applications, discusses candidates and decides on admission. EARTH faculty not on the committee review provide feedback on those students who list them as a potential major advisor. Admissions decisions and admittance are based on identifying the highest priority applicants (those for RA offers or top candidates for TAs) as well as applicants of middle and low priority (which only get considered after top priority have declined offers of admission). Applicants achieve higher priority status through some but not all of the following criterion: GPA(s); BA vs BS vs MS in record; research experience; previous program(s) attended; recommendation letters; personal essay; writing sample (if provided); strength of previous coursework (e.g., math background); feedback from faculty who would be the major advisor; and if those major advisors are looking for a student. Based on funding availability and the number of students who are graduating in a given year, we typically have room to add 2-5 new students with funding. We make offers with funding starting with high priority applicants and move down the list throughout the admissions cycle.
3. The graduate committee typically nominates 2 or more high priority candidates for UConn fellowships (i.e., the Harriott, Crandall, and Jorgensen). All applicants are given the option to self-nominate for these fellowships during the admissions process.

The UConn Graduate School maintains a website specifically dedicated to the challenges and issues of systemic inequity that BIPOC (Black, Indigenous and People of Color) graduate students face in the admissions process. The Graduate School has targeted many areas that need to be assessed and addressed, and in 2021-2022, the stated focus is admissions and fellowships. More information at <https://grad.uconn.edu/bipoc-report/>.

Search Committees

Not all hires at UConn require a search committee (e.g., postdocs). For **faculty** hires, the search committee ensures that the search process is consistent for all applicants and the hiring criteria are objectively applied. Search committees provide a broad and diverse range of viewpoints, allowing all aspects of an applicant's candidacy to be considered. Search committees also can act as a safeguard

against inherent bias in the evaluation process. Additionally, the utilization of a search committee can support the outcome of a search if the hiring decision is questioned by an unsuccessful applicant or outside party. In EARTH, search committees are appointed by the Department Head. Committees include faculty and graduate student representation. All effort is made to ensure that the committee is as diverse as possible, while also considering the “time tax” affecting underrepresented groups.

Graduate student admissions decisions are made by the Graduate committee, which consists of 3 EARTH faculty. As stated above, EARTH faculty not on the committee review and provide feedback on those students who list them as a potential major advisor. Final funding decisions are made by the Graduate committee in consultation with the Department chair.

The average applicant to our graduate program interacts with one or two potential advisors over email and may contact the graduate committee chair and/or departmental administrator concerning procedural questions about the application process. Some applicants have no interactions at all and on occasion, applicants visit the department prior to finishing an application.

Admitted applicants usually visit the program or arrange for video conferences where they meet with major advisors, overlapping faculty, the graduate committee and current graduate students. These longer interactions help applicants make the final decision on whether or not to accept, and also help the department to recruit them and encourage them to choose UConn.

Evaluation of Policies and Procedures

ERTH is required to follow the faculty hiring policies and procedures required by UConn and CLAS. We are unsure whether the process has been evaluated by outside consultants, nor are we sure of the process for changing it.

For graduate admissions, the graduate school reviews individual programs and informs departments of any issues. Internally, EARTH reviews its admission process to determine how efforts could be improved in the next year.

Leveraging Promising Practices

UConn and the College of Liberal Arts and Sciences (CLAS) have implemented cohort hiring for faculty, but in the sense of discipline/expertise rather than diversity. CLAS recently hired nine faculty who focus on three areas of [diversity scholarship and education](#), but have not considered hiring a cohort of faculty from underrepresented groups who work in STEM disciplines.

CLAS is committed to supporting dual-career couples. Once a Department Head is aware of the desire for such a position, they should contact the Associate Dean that oversees the department. The Dean’s Office will help the Department Head find viable options, and when circumstances allow, will provide and seek partners for resources.

SAFETY AND CONDUCT EXPECTATIONS

The Department of Earth Sciences values the participation of every member of our community and wants to ensure everyone has an enjoyable and fulfilling experience, both professionally and personally. Accordingly, all members of the Department of Earth Sciences are expected to show respect and courtesy to others at all times.

In addition to making group members feel safe and secure, diversity and inclusivity benefits us all. The greater the mix of people in our department, the greater the mix of skills, experiences, perspectives, and ideas. But the benefits of diversity and equality cannot be fully achieved without creating an inclusive environment.

Enjoyable, high-quality work can only be conducted when all participants feel safe, secure, and supported. We acknowledge the historically exclusionary and unsafe nature of geosciences for minoritized researchers, and this document especially serves to ensure that department members from these groups feel protected and included. All department members are thus expected to foster a harassment-free experience for everyone, regardless of gender identity and expression, sexual orientation, disability, physical appearance, body size, race, ethnicity, age, and/or religion. We have a zero tolerance policy for harassment by and/or of members of our department in any form. All members of the community are expected to conform to the following expectations:

- UConn faculty, graduate assistants, postdocs, and staff are required to undertake required training and to read and follow the [UConn Employee Code of Conduct](#). The code is designed to (1) set the basic standards of workplace behavior that the University expects of all faculty, administrators and staff, (2) state publicly the University's long-term commitment to the highest standards of integrity in education, research, health care, public engagement and service, and (3) assure that faculty, administrators and staff understand their shared responsibility for keeping the University in full compliance with all applicable laws, regulations and policies.
- Students are expected to read and follow the [UConn Student Code](#). The Student Code describes the types of acts that are not acceptable in an academic community as well as the general process by which they will be addressed.
- All members of the department are responsible for maintaining an environment in which people are free to learn and work without fear of discrimination, discriminatory harassment or interpersonal violence. Students, faculty, and staff are expected to undertake all required training as well as read and adhere to the [UConn Policy Against Discrimination, Harassment, and Related Interpersonal Violence](#). The policy covers sexual and gender-based harassment, sexual assault, sexual exploitation, intimate partner violence, stalking, complicity, retaliation and inappropriate amorous relationships.
- All members of the Department are expected to abide by the department's [diversity, equity, and inclusion values](#): *The UConn Department of Earth Sciences values diversity, prioritizes inclusion, and strives for justice and equity within our community and beyond. We embrace diversity in all forms and have zero tolerance for any form of discrimination or harassment. We believe that the best science arises from the integration of diverse ideas and experiences. Therefore, promoting and fostering diversity of all types is important to us.*
- As part of the international geoscience community, members of the Department of Earth Sciences endorse the [American Geophysical Union Scientific Integrity and Professional Ethics Policy](#). Our department ascribes to the guidelines set out by AGU to the extent that they do not conflict with UConn policies.

- Be respectful to others, and do not insult or put down other members of the Department of Earth Sciences.
- Contribute to discussions with a constructive, positive approach.
- Be mindful of talking over others when discussing in groups, and be willing to hear out the ideas of others.
- All communication, be it online or in person, should be appropriate for a professional audience, and should be considerate of people from different cultural backgrounds. Sexual language and imagery are not appropriate. Harassment and sexist, racist, or exclusionary jokes are not tolerated.

A faculty member or, if needed, the ombudsperson(s) or Department Head will discuss this Code of Conduct with any members who violate these rules, no matter how much they contribute or how senior their position in the department. If inappropriate behavior persists after this discussion, formal processes will commence (see below). Any issues related to this Code can be reported to the Head or ombudsperson(s) and will be treated as confidentially as possible within legal and university requirements. If a member of the department is uncomfortable approaching any of these people, they may instead file a report directly with the Office of Institutional Equity (OIE), which is the UConn Title IX office (<https://equity.uconn.edu/title-ix/>).

Mental Health Considerations

There is increasing evidence that certain attributes of academic research may challenge peoples' mental health. Specific factors driving this include:

- Quality-of-life issues, including financial stress
- Feelings of isolation in one's research; e.g. everyone has their own topic and it can sometimes feel as if you are working on your own
- Uncertainty in research and so-called "negative" results (e.g., a question is more challenging to answer than expected, results are not statistically significant, or months of work do not produce the results hoped)
- For students and postdoctoral scholars, uncertainty about their post-UConn career
- Burnout, i.e., working endless hours without sufficient breaks and the resulting physical and mental exhaustion

Anyone may encounter these hurdles, and members of the department are encouraged to take an active and preemptive approach towards the maintenance of their physical and mental health, including reaching out to university and local resources, scheduling reasonable breaks, and discussing their needs with a supervisor, ombudsperson, or the Department Head. Likewise, supervisors are encouraged to accommodate supervisees' reasonable breaks and other measures intended to maintain physical and mental health.

Research Guidelines

Faculty members and research teams should openly discuss authorship expectations and ethics in their team meetings. Those who have made a significant contribution to the work for a publication,

including external collaborators and students, should generally receive authorship and be involved in the writing and publication of manuscripts and other products. Faculty research leaders are expected to develop and communicate clear guidelines regarding what constitutes a “significant contribution” and about ethical practices in publication and presentation of research.

In line with federal requirements and university expectations for research, all computers and data sets should be backed up regularly and saved to each research team’s data storage. Faculty research leaders are expected to communicate clearly how data are to be saved and backed up to avoid data loss and maintain the integrity of their research. Researchers are likewise encouraged to develop and communicate policies to their teams regarding placing data and metadata in professional repositories.

Faculty research leaders should develop policies and communicate clearly with their teams regarding conference and workshop participation for team members, including the level of funding support available, any expectations that members will supplement or prepay the costs of attendance (which should be minimized to avoid hardship), and presentation expectations. Faculty should also communicate explicitly regarding submission and publication of abstracts, pre-approval by coauthors and collaborators, and similar practices.

Working hours

Members of the Department of Earth Sciences are expected and recognized to have personal responsibilities and obligations in addition to their jobs and studies. At times, research, teaching, and service demands may require an atypical work schedule, rather than the traditional ‘9-to-5’ scheduled work day. In many cases, the number of hours worked or times for them may not be explicitly stipulated (with the notable exception of student hourly wages or fellowship appointments based on contracted hours). Faculty leaders are expected to communicate clearly with members of their team and any graduate assistants involved in their courses about work expectations, reasonable work hours, expectations when extenuating circumstances (such as illness) arise, and planned vacations and breaks. Work expectations should be developed with an awareness of the mental health needs of all team members.

Mentorship guidelines

Faculty mentoring

New faculty are required to work with the Department Head to identify a mentor or mentors within their first semester on campus. Tenured faculty working towards promotion to full are encouraged to develop mentoring relationships with faculty who are fully promoted. In initial mentorship meetings, mentors should aim to discuss and identify expectations for the frequency of future meetings, any products expected or encouraged (journal articles, formal and informal presentations, etc.), and desired goals and training to address over future meetings. Those goals could include: developing and practicing time management strategies, training in useful tasks like reviewing manuscripts, plans and advice for revising and submitting manuscripts and coping with criticism and rejection, career advice and guidance, how to address media requests, and navigating current events. Mentors and mentees should occasionally revisit and amend these plans and goals as needed during their relationship.

Mentoring of Graduate students and Postdocs.

Advisors should provide clear expectations for their mentees, clarify the frequency of expected advisor and/or committee evaluations, and review short- and long-term goals so expectations are clear. Mentors should also encourage their mentees to engage in self-reflection, and provide advice and input about how to best achieve long-term goals. Both mentors and advisors should be familiar with the latest collective bargaining agreement of the [UConn Graduate Employee Union](#).

Mentoring for graduate students occurs in two major ways in the department—at the individual advisor level and within the department as a whole. Graduate advising, whether for a MS or a PhD, consists of one-on-one instruction in research methods, analysis, and communication that aids the student in becoming an independent researcher. Graduate advising is done by members of the UConn graduate faculty, and may include faculty outside the department or outside the university who serve on an individual student's Advisory committee. In the department, the primary mentor and graduate advisor for all students is their major advisor. For the thesis MS and PhD, the major advisor is appointed at the time of admission; for the non-thesis MS degree (and planned 4+1 MS in Environmental Geoscience) the major advisor is chosen by the student in the first semester of the program. For the thesis MS or PhD the major advisor chairs the student's advisory committee, supports and guides the thesis research, and administers the defense. For a PhD student, major advisors also administer the General Exam and Dissertation Proposal defense. Associate members of a student's Advisory committee serve several important roles: they provide breadth to the committee, assist the student in research and(or) writing, and provide an alternative faculty member to discuss issues that might arise. Students have regular committee meetings with their entire Advisory committee (minimum once a semester) where they receive guidance and feedback on their progress and all faculty on the committee (major advisor and Associate advisors) ultimately sign off on the thesis. Overall, this graduate advising process leads to valuable one-on-one mentoring by 3-5 faculty members throughout a student's degree, and in most cases, into long-lasting collegial relationships.

At the department level, all 1st year graduate students participate in a professional development course in their first semester that serves not only to mentor students in hard and soft skills, but also to develop a strong cohort. Many departmental social events also occur throughout the year (annual Fall picnic, Fall Holiday luncheon, end of year celebration, etc.) that strengthen faculty-student relationships and bring a sense of community to the group.

In addition to individual mentoring via the student's major advisor and Advisory committee members, the Department has a number of formal, group mentoring activities and means by which the students participate in an active community cohort. The centerpiece of our communal graduate mentoring efforts is our Graduate Group which has a formal leadership structure and weekly meetings where they discuss papers, practice conference presentations, have panel discussions, and organize hikes and outings. The Graduate Group takes a lead role in two important annual department activities. For "Earth Science Day," students organize a day-long geoscience fair for the community. The event is extremely successful with an average attendance of 200 people from UConn and the surrounding community. Second, in the Spring, the Grad Group organizes a day-long research symposium, called "Geoscience Day," which features an invited plenary speaker, as well as oral and poster presentations by students. The event includes awards for best talk and poster and a departmental year-end luncheon. These activities help mentor and train the students in organizing events, working together as a team, reviewing and editing abstracts and other professional

skills. Other mentoring activities throughout the year include meeting with seminar speakers and participating in a mentoring series hosted by the department. Graduate students are also members of key committees, such as the DEI Committee and have a representative attend all department meetings.

Best Practices for Mentoring

Faculty members and research team leaders are encouraged to consider adapting their mentorship approach to better address the impact of racism, sexism, and other forms of discrimination on students. Chaudhary and Berhe (2020) suggest the following approaches, which PIs should consider implementing:

- Confront racial inequities in your research field directly and with members of your research team.
- Lead your group in informed discussions about the impacts of racism and discrimination.
- Immediately address any discriminatory or problematic incidents that occur in your group, research team, or class.
- Write explicit lab, office, and field safety guidelines that directly address racism and discrimination.
- Collaborate with diverse colleagues, but do not tokenize: collaboration must be equitable and genuine.
- Amplify the voices of underrepresented scholars in your field.
- Maintain a flexible and collaborative research agenda that is open to new approaches and ideas.
- Advocate for diverse leadership in your field.
- Hold others accountable for their behavior, but do not expect anything in return.
- Ask underrepresented and minoritized group members what they might need to be safe and to avoid harassment or danger in the field, on campus, or while visiting external facilities.
- Provide work partners for anyone who feels at risk in their work setting.
- Encourage group members, particularly minoritized members, to seek out diverse mentors.

Safety and Inclusivity in Fieldwork

Training and working in the field is an important component of many research projects and careers in Earth Sciences, but it presents unique safety and inclusivity concerns. Instructors, research team leaders, and field participants should be educated about these concerns and develop advance plans for risk reduction and safety responses. Recommended strategies and approaches are provided below. All trip leaders, whether for research or teaching, should develop a careful and explicit safety plan in advance of any trips, receive pre-approval of their plan by a department supervisor, and communicate the details of that plan to all trip participants.

Note that instructors who are leading field trips for academic credit must also adhere to the **Department of Earth Sciences Field Trip Policy and Procedures**. These are provided in the *Department Handbook* for faculty.

To be fully inclusive, the department recognizes that not all careers in geoscience require traditional fieldwork, and that some people are disproportionately unsafe in some field environments. This can be exacerbated where a masculine fieldwork culture persists. Instructors and research team leaders are expected to be sensitive to students' diverse needs, and to design programs and opportunities that are safe without penalties, including non-field opportunities. This applies to graduate student research projects as well as students in a class or seminar group.

Likewise, there are some field locations that may not be a safe choice for all participants. PIs and instructors should give serious second thought to bringing team members or students to such locations. Many departments and groups have reduced or halted travel with groups or research teams to intolerant areas that may be unsafe for their group members, and this is an acceptable choice. For example, some locations have severe legal consequences, even the death penalty, for being LGBTQIA+; and some states in the U.S. police and/or penalize restroom choice for trans and gender-nonconforming people.

- Field safety plans must include advance planning for basic trip logistics. For educational trips, this includes advance planning for vehicle reservations and drivers (for local trips accessed by car), housing plans, clear driving directions and maps, contingency plans (e.g., responses to hazardous weather, blocked road access, participant injuries, or dangerous encounters with local residents or wildlife).
- Whenever possible, research team leaders should be present in the field to lead and introduce any local hosts. Even when this is not possible, solo field work should be avoided if possible. If it is necessary for someone to remain in the field alone for any period, that participant should have a point of contact and check in daily with them, with a clear communication plan.
- Emergency contact tools should be provided for members of the department going into the field for classes or research whenever possible. Some field areas are remote and have poor cell phone access, and include mountainous terrain that limits the functionality of two-way radios. One option is for the department to maintain a few satellite phones that can be checked out by faculty and graduate researchers for more remote trips.
- Field plans should include a racial risk assessment for all sites. When possible, it is ideal to document cases of prior risk exposure for a given field site, and to maintain a list of such incidents. For research teams, that list can be shared in advance and provided in hard copy to carry during the trip.
- All field trips should include a pre-departure checklist of discussions to have with the class or field team, including how to document incidents in the field and completing any necessary training. These discussions can include a basic summary of any local cultural expectations that may be unfamiliar in the field area.
- For field trips with optional stops that include a fee, check in with the group in advance to invite students to confidentially approach the trip leader if they would privately need those fees subsidized. Otherwise, this presents a barrier to participation for those with economic restrictions.

- First aid kits should include pads and tampons, extra toilet paper, hand sanitizer or wipes, and zip-loc bags for discreet field disposal. Trip participants should know where this kit is kept and have free access to it. Trip leaders should check and restock the kit before every trip and regularly while in the field.
- As part of the field safety plan, trip leaders should carefully consider disability access issues in advance of the trip for all planned stops. In their advance discussions with the group, they should communicate with participants about the ruggedness of terrain. Leaders should have a backup plan for any participants who unexpectedly arrive for the trip with a mobility-limiting injury or condition, either because it is a new condition or because they were uncomfortable about confidentiality. One approach for this contingency for local field trips is to bring an extra graduate assistant or faculty member who can operate one of the vehicles and relocate any students if necessary, and to incorporate field stops that are accessible directly from vehicles where possible.
- Trip leaders should have a thoughtful field safety plan. This means planning out resources and strategies for responding to threatening people who approach any members of the team or class, even when isolated or remote without cell service.
- Trip leaders can consider requiring “buddies” for going to the bathroom, and/or for an instructor to be told before anyone wanders off. For minoritized group members, one approach to assist with safety when separated from the rest of the group is to encourage them to select a non-minoritized member as a field buddy, if they are comfortable doing so. This can place other trip participants in the role of an ally and help to build trust.
- Easily visible credentials and advance notice can sometimes help deter external threats to trip participants. Trip leaders can inform any local property owners or field managers when the group will be there and where they will be going. Neighbors can be informed of planned field visits using a brief note that the team will be conducting research or training nearby, with contact information that clearly identifies a legitimate research affiliation. Likewise, identifying markers can be added to any vehicles that lack them (such as a magnetic sign for rented, non-university vehicles). Departments can also supply an official letter of support for researchers doing fieldwork with contact information, to add credibility if participants are challenged.
- Trip leaders should implement a strict policy that they discuss with each research group or class regarding abuse, with a clear code of conduct for the field that is presented in writing and verbally before departing, and that any inappropriate incidents will be reported. Policies should include consequences for retaliation. As part of the participant code of conduct, trip leaders should stipulate clear policies and limits around drug and alcohol use and possession.
- Harassment in the field is serious. If at all possible, trip leaders should be encouraged to include sufficient funds to permit separate rooms in indoor lodging accommodations. Leaders should also take requests for moving rooms or having an individual room seriously.
- Sometimes, despite advance planning and precautions, a high risk, hostile, and/or race-related incident or encounter may occur while in the field. Faculty should discuss such incidents with the group when they occur and conduct and encourage bystander intervention. All hostile encounters should be documented, even if they are not severe, and they must be addressed immediately. If it becomes necessary, the team should have a plan for departing dangerous locations or relocating to safety.

- Likewise, those conducting work in the field without a team leader present should be instructed to inform a supervisor immediately if they feel unsafe in the field. The supervisor should assist in any way possible to ensure their participants' safety.
- For group trips, trip leaders should plan and include visits to convenience or grocery stores in case of private needs for emergency supplies, if at all possible. Any personally communicated needs that make an additional trip to such facilities necessary should be treated as confidential.
- Likewise, toilet access and related issues should be addressed directly. Trip leaders should not assume their participants have experience with or know how to eliminate comfortably in the outdoors or primitive facilities. They should understand that elimination in unfamiliar environments entails a learning curve and is intimidating for many; this can be made much more comfortable by sharing explicit instructions for each field area. Inadequate access to or knowledge about what to expect in terms of toilet access causes significant stress, sometimes leading to participants drinking less water because they are afraid of a lack of access to needed facilities. This is a safety issue, and one that is particularly difficult for those who squat to urinate, on trips with large groups, and in landscapes with little privacy. Instructors should carefully plan and communicate about regular toilet stops on trips, even if it seems inconvenient, and never appear frustrated at requests or members may avoid asking for their needs. Field guidelines should address these issues with clear policies and protocols for different areas.
- Similarly, trip leaders should not assume that people who menstruate know how to handle this in a field environment or without access to full restroom facilities and showers. Individuals who menstruate need to change products frequently for sanitation and basic safety, so regular access to facilities and instructions about how to handle menstruation without them is necessary.

Safety and Inclusivity in Laboratory Settings

Individual faculty lead research groups maintain their own plans for their research groups and often lead their own discussions on diversity and inclusion or ways to address potential issues in the workspace prior to the arrival of new group member. Expectations for lab work and work progress will be laid out by the advisor/mentor and a typical meeting schedule will be established as a laboratory group and for individual meetings. In addition, the advisor will explain expectations for taking vacation (e.g., timing and length), for reasonable work hours (e.g., 40-50 hrs/wk), and when to return to campus after breaks. Lab group supervisors are responsible for ensuring that everyone in their group has undertaken all safety training required by the university. They are also strongly advised to develop a code of conduct for their laboratory space and research group.

RESOURCE MAP

The intent of this section is to provide a resource map for all members of the Department of Earth Sciences, to connect new hires and students with resources they need or will find useful.

Communication

- EARTH faculty and students communicate with each other mainly in person and through email. Unless traveling, faculty and staff are expected to respond to emails within one business day. Graduate students, in particular those involved in teaching, are expected to hold to the same standards.
- EARTH supports listservs to facilitate communication to different groups (faculty and staff, graduate students, and undergraduate students). Anyone wishing to sending a message to one or more of these groups should coordinate with office staff.
- All PIs should have an established schedule of individual and group meetings to establish goals, check in with each other, and identify changes that need to be made to provide a safe environment.
- With the exception of emergency situations, faculty and students are not expected to monitor and respond to work emails outside of standard work hours.
- Private phone numbers of faculty and staff are not provided to others without permission.

Equipment

- The UConn Adventure Center rents high quality outdoor equipment, including items for hiking and camping, at affordable prices.
- The department has limited equipment available to borrow. Students should check with trip leaders.

Conference and workshop participation

Graduate students are expected to present their research at least one conference. Students should seek financial support from a range of sources. Examples are listed below.

- UConn sources: their advisor, the Graduate School [Conference Participation Award](#), and the department (limited).
- Beyond UConn: travel grants from the society hosting the conference.

The department is open to considering proposed workshops/conferences and other events, especially for groups like SACNAS, NABG, AISES, GeoLatinas and others.

Community support and resources

University Services for diversity, counseling and psychological services, ombudsperson, affinity groups, etc. The Department will be mindful of options and connect students and employees with someone who can better relate to their experience

- [Student Support Services \(SSS\)](#)
- [Diversity, Equity, Inclusion, and Justice @UConn](#)
- [UConn Office for Diversity and Inclusion](#)
- [UConn Student Health and Wellness](#)
- [UConn Employee Assistance Program](#)
- EARTH DEI Committee

Activities, clubs and organizations available at UConn:

- EARTH Geoclub
- EARTH Grad Group
- [UConn Student Organizations](#)

Cohorts, organizations, social clubs with common identities and/or interests

- [UConn cultural centers](#)
- [UConn affinity communities](#)

Businesses or other needs, e.g. gyms, barber shops/hair services, etc.

- [UConn Recreation \(gym, etc.\)](#)
- [Natural black hair salons](#)

Skillset support resources

- All graduate students who are working as teaching assistants are required to take the [New TA Orientation course](#) offered by the Center for Excellence in Teaching and Learning prior to their first semester teaching. This course is offered twice a year, in the week proceeding the start of the fall and winter semesters. The site also provides a list of resources for teaching. TAs should meet with the instructor with whom they will be working at least one week prior to the start of the semester to discuss work expectations.
- Graduate students should consult their advisor for details on skills and experiences needed to complete their research. The advisor will work with the student to ensure that such skills are provided, either one-on-one or via classwork.
- Graduate students are encouraged to EARTH 5000 Geoscience Core Course during their first semester at UConn. This course provides students with opportunities to develop skills in public speaking, writing, and presentation.

Professional development resources

- Teaching/pedagogy
- [Center for Excellence in Teach and Learning Resources](#) include information on equity minded teaching, course design, assessment, etc.
- [Center for Excellence in Teaching and Learning Services](#) include consultation and a range of centers to support certain aspects of teaching (writing, testing, software and hardware, etc.)
- The Center for Excellence in Teaching and Learning offers extensive [programs and events](#) for faculty and teaching assistants to advanced their teaching.
- The [UConn Center for Career Development](#) offers numerous career development workshops for graduate students, focused on networking, research, the job search, and more.
- A range of professional societies exist that bring people within geoscience subdisciplines together around common interests. Graduate students should seek advice from their advisor on which societies will best suit their career goals. The Department will consider covering membership fees upon request for organizations like SACNAS, NABG, and AISES, and highlight organizations like GeoLatinas (no fee for membership), and others.
- The Department will routinely share opportunities for fellowships, internships, jobs, etc. with undergraduate and graduate students via email through its listservs. The department also maintains a website to connect students to opportunities at https://geosciences.uconn.edu/undergrad_research/.
- The Department seminar series is scheduled for 12:30-1:30 PM on Fridays. A list of seminars is provided to the department community at the start of each semester. Shortly before each visit, a link to a google document is provided that allows students and faculty to sign up for opportunities to meet with visiting speakers.

Outreach resources

- The department is aware of the “time tax” put on people of color and women associated with participation in DEI and recruiting activities. While participation of all students is welcome and encouraged, there is no requirement or expectation of participation.
- All faculty are encouraged to participate in open houses and other recruiting events. We seek to distribute the “load” of such events equally. Participation in such outreach is factored into merit considerations, as explained in the department’s service policies. CLAS specifically lists “*increasing diversity and equity, as well as fostering an inclusive climate*” as a criterion that merits discretionary salary increases.
- The department DEI committee provides an opportunity for interested faculty and students to engage in improving belonging, accessibility, justice, equity, diversity, and inclusion in the geosciences and in our department.