

ENG 177: Foundations for Undergraduate Research I

COURSE INFORMATION

Instructor: Megan Griebel, Ph.D. (mgriebel@illinois.edu)

Engineering Learning Assistant (ELA): Tiana Foreman (tiananf2@illinois.edu)

Weekly meeting time and location:

Tuesdays, 10-10:50 AM
3038 Campus Instructional Facility

Course Description

This course, *Foundations for Undergraduate Research I*, is an introductory course for students in the Grainger First-Year Experience (GFX) Research Scholars program. It is designed as a series of workshops and class discussions with case studies and collaborative assignments to establish a community of novice researchers as a cohort. It will provide undergraduate students with guidance and resources to use as they begin their research journey. The course will focus on current research in science and engineering on campus and provide background preparation for students interested in participating in research as an undergraduate. It will highlight innovations/accomplishments in the science and engineering fields.

Learning Objectives

At the end of the course, you should be able to:

1. Identify and articulate areas of research interests
2. Recognize the importance of research safety
3. Define and explain the steps of the scientific process
4. Find and evaluate basic information related to your research interest
5. Connect research to issues relevant to society
6. Communicate effectively about your research interests (written and verbal form)
7. Learn about navigating mentor-mentee relationships
8. Make a judgment regarding ethics and responsible conduct of research
9. Collaborate with peers to create group presentations
10. Journal and reflect on experiences related to your journey as a researcher

Course Website

The Canvas site (<https://canvas.illinois.edu/>) will be used for all course announcements and materials.

Office Hours

- TBD, check Canvas Office Hours Page for up-to-date schedule
- By appointment with course instructor

Textbook and Reading Materials

No textbook is required. Reading materials relevant to the content will be assigned via Canvas.

Course Content and Assignments

Please note that the instructor reserves the right to make changes to the schedule at any time if necessary. Every effort will be made to convey the changes to the students in a timely manner. See up-to-date schedule on Canvas.

Quizzes (15% total): Quizzes will be delivered in class and may cover lecture material and any assigned readings.

Participation (10% total): As teamwork is central to success in engineering, you will receive a participation grade based on your effort as well as feedback from your group, ELA, and instructor.

Assignments (60% total): Assignments will consist of worksheets, reflection journals, and activities including the preparation of a cover letter and CV.

Final Presentation (15% total): Towards the end of the semester, in groups, you will create and deliver a presentation to the class on a research topic of your choice.

Grading Scale:

≥97.0	A+	≥87.0	B+	≥77.0	C+	≥67.0	D+
≥93.0	A	≥83.0	B	≥73.0	C	≥63.0	D
≥90.0	A-	≥80.0	B-	≥70.0	C-	≥60.0	D-

Scores will be rounded to the nearest 0.1%. Requests for grade inflation or extra points will not be accepted.

COURSE POLICIES

Course-Related Communication: Email communication is preferred between students and the instructor. Please be professional in all communications. We will do our best to respond to emails within one business day. Please allow two business days before sending a follow-up email.

Attendance: You are expected to attend the entire class period and to be in class on time. Attendance will be taken for every meeting and will count towards your grade. Students are responsible for all materials and announcements given during the class time, including quizzes. For planned schedule changes for university-excused absences, religious observances, interviews, or university-sponsored athletic events, please contact the instructor as soon as possible, and at least one week before class.

Illness Policy: Students who feel ill must not come to class. In this case, students should let the instructor know as soon as possible. The instructor may waive the assignment for the day or provide a make-up assignment as deemed appropriate. Repeated absences will require an absence letter from the Dean of Students addressed to the instructor.

Laptops and Mobile Devices: Unless given permission as part of an assignment, as a courtesy to your fellow students and instructors, you are expected to put away your cell phones during class. If you are expecting an emergency/important phone call, please step outside the classroom to take it and make one of the instructors aware beforehand if possible. For most lecture and in-class discussion sessions, all screens (e.g., laptops and phone) will be put away unless the student provides DRES documentation seeking a screen as reasonable

accommodation. There will, however, be days when laptops or other electronic devices are required. On these days, we reserve the right to see your screen at any time.

Academic Integrity: As future researchers you should conduct your work in an honest and professional manner. Practicing research integrity include, but is not limited to:

- Attributing authorship based on appropriate authorship criteria.
- Attributing credit for work and ideas through proper acknowledgement and citation.

Academic dishonesty may result in a failing grade in the course. All students are expected to read and abide by the [University of Illinois at Urbana-Champaign Student Code](#), including [Article 1, Part 4: Academic Integrity](#). Ask the instructor if in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity. ***Ignorance is not an excuse for any academic dishonesty.***

UNIVERSITY POLICIES AND RESOURCES

Community of Care: As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regards to their well-being or yours, we encourage you to refer this behavior to the Student Assistance Center (217-333-0050 or <http://odos.illinois.edu/community-of-care/referral/>). Based on your report, the staff in the Student Assistance Center reaches out to students to make sure they have the support they need to be healthy and safe.

Further, as a Community of Care, we want to support you in your overall wellness. We know that students sometimes face challenges that can impact academic performance (examples include mental health concerns, food insecurity, homelessness, personal emergencies). Should you find that you are managing such a challenge and that it is interfering with your coursework, you are encouraged to contact the Student Assistance Center (SAC) in the Office of the Dean of Students for support and referrals to campus and/or community resources.

Disability-Related Accommodations: To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor as soon as possible and provide the instructor with a Letter of Academic Accommodations from Disability Resources and Educational Services (DRES). To ensure that disability-related concerns are properly addressed from the beginning, students with disabilities who require assistance to participate in this class should apply for services with DRES and see the instructor as soon as possible. If you need accommodations for any sort of disability, please speak to me after class, or make an appointment to see me or see me during my office hours. DRES provides students with academic accommodations, access, and support services. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 217-333-1970, e-mail disability@illinois.edu or visit the DRES website at <http://www.disability.illinois.edu/>. Here is the direct link to apply for services at DRES, <https://www.disability.illinois.edu/applying-services>.

If you are concerned you have a disability-related condition that is impacting your academic progress, there are academic screening appointments available that can help diagnosis a previously undiagnosed disability. You may access these by visiting the DRES website and selecting "Request an Academic Screening" at the bottom of the page.

Disruptive Behavior: Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the

problem and may be reported to the Office for Student Conflict Resolution (<https://conflictresolution.illinois.edu>; conflictresolution@illinois.edu; 333-3680) for disciplinary action.

Diversity and Inclusion: We value all students regardless of background and are committed to fostering a climate of inclusion in the classroom. The diversity of participants in this course is a valuable source of ideas, problem solving strategies, and engineering creativity. If you feel that your or any other student's contribution is not being valued for any reason, please speak with us directly or submit anonymous feedback.

Emergency Response Recommendations: Emergency response recommendations can be found at the following website: <http://police.illinois.edu/emergency-preparedness/>. You are encouraged to review this website and the campus building floor plans website within the first 10 days of class.

Family Educational Rights and Privacy Act (FERPA): Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See <https://registrar.illinois.edu/academic-records/ferpa/> for more information on FERPA.

Grainger College of Engineering Statement on Anti-Racism and Inclusivity: The Grainger College of Engineering is committed to the creation of an anti-racist, inclusive community that welcomes diversity along a number of dimensions, including, but not limited to, race, ethnicity and national origins, gender and gender identity, sexuality, disability status, class, age, or religious beliefs. The College recognizes that we are learning together in the midst of the Black Lives Matter movement, that Black, Hispanic, and Indigenous voices and contributions have largely either been excluded from, or not recognized in, science and engineering, and that both overt racism and micro-aggressions threaten the well-being of our students and our university community.

The effectiveness of this course is dependent upon each of us to create a safe and encouraging learning environment that allows for the open exchange of ideas while also ensuring equitable opportunities and respect for all of us. Everyone is expected to help establish and maintain an environment where students, staff, and faculty can contribute without fear of personal ridicule, or intolerant or offensive language. If you witness or experience racism, discrimination, micro-aggressions, or other offensive behavior, you are encouraged to bring this to the attention of the course director if you feel comfortable. You can also report these behaviors to the Bias Assessment and Response Team (BART) (<https://bart.illinois.edu/>). Based on your report, BART members will follow up and reach out to students to make sure they have the support they need to be healthy and safe. If the reported behavior also violates university policy, staff in the Office for Student Conflict Resolution may respond as well and will take appropriate action.

Mental Health: Significant stress, mood changes, excessive worry, substance/alcohol misuse or interferences in eating or sleep can have an impact on academic performance, social development, and emotional wellbeing. The University of Illinois offers a variety of confidential services including individual and group counseling, crisis intervention, psychiatric services, and specialized screenings which are covered through the Student Health Fee. If you or someone you know experiences any of the above mental health concerns, it is strongly encouraged to contact or visit any of the University's resources provided below. Getting help is a smart and courageous thing to do for yourself and for those who care about you.

- Counseling Center (217) 333-3704
- McKinley Health Center (217) 333-2700
- National Suicide Prevention Lifeline (800) 273-8255
- Rosecrance Crisis Line (217) 359-4141 (available 24/7, 365 days a year)

If you are in immediate danger, call 911.

Religious Observances: Illinois law requires the University to reasonably accommodate its students' religious beliefs, observances, and practices in regard to admissions, class attendance, and the scheduling of examinations and work requirements. You should examine this syllabus at the beginning of the semester for potential conflicts between course deadlines and any of your religious observances. If a conflict exists, you should notify your instructor of the conflict to request appropriate accommodations. **This should be done in the first two weeks of classes.**

Sexual Misconduct Reporting Obligation: The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX Office. In turn, an individual with the Title IX Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: <https://wecare.illinois.edu/resources/students/#confidential>. Other information about resources and reporting is available here: <https://wecare.illinois.edu/>