

MSE 4699 – Spring 2027

Undergraduate Research

- Instructor:** Prof. Scott Danielsen
273A Paper Tricentennial Building
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- Course Description:** Undergraduate research conducted under the guidance of a faculty mentor.
- Course Materials:** No textbooks or materials are required. Resources for research are determined in consultation with the thesis advisor.
- Course Outcomes:** By enrolling in this course, students will:
- 1) Use and understand professional and discipline-specific language
 - 2) Effectively connect multiple ideas/approaches
 - 3) Demonstrate an ability to work independently and identify when guidance is needed
 - 4) Recognizes that problems are often more complicated than they first appear
 - 5) Uses a reflective and iterative approach to problem solving
 - 6) Demonstrates ability to formulate questions and hypotheses within the discipline
 - 7) Demonstrates ability to properly identify and/or generate reliable data
 - 8) Displays a grasp of relevant methods and is clear about how these methods apply to the research project
 - 9) Demonstrates an appropriate mastery of skills needed to conduct the project
 - 10) Shows understanding of the importance of principles of Responsible Conduct of Research (RCR)
- Grades:** Your grade in the course will be determined based on your effort in research commensurate with registered credit hours and as discussed with faculty research mentors.
- The course grading scales are:
- | | |
|------------|---------------|
| A: 90-100% | Pass: 60-100% |
| B: 80-89% | Fail: 0-59% |
| C: 70-79% | |
| D: 60-69% | |
| F: 0-59% | |
- Attendance:** Undergraduate research students will participate in research activities on a weekly basis commensurate with registered credit hours and as discussed with faculty research mentors.
- Research Integrity:** Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in

immediate consequences as outlined in the university's academic honor code: <https://policylibrary.gatech.edu/student-life/academic-honor-code>

Accommodations: If you are a student with learning needs that require special accommodation, [contact the Office of Disability Services](#) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Expectations: Faculty research mentors and students should discuss and agree on expectations before beginning an undergraduate research course. Expectations should include the student's weekly time commitment; methods and frequency of communication between the student and mentor(s); how research will be recorded, stored, and shared; and when and how students will reflect on their successes and challenges. At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student–Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

To support mutual respect and understanding between students and faculty, Georgia Tech faculty and students collectively adopted a list of student–faculty expectations. See the full [Student–Faculty Expectations agreement](#).