CS 4699 - Credit research hours for 3rd+ year students

Instructor
Christopher Rozell

Section
R18

CRN
56878

Semester
Summer 2026

Academic Year
2026-2027

Course Description
Undergraduate research conducted under the guidance of a faculty mentor.

Course Learning Outcomes

- Communication
  - Uses and understands professional and discipline-specific language
  - Expresses ideas orally in an organized, clear, and concise manner
  - Writes clearly and concisely using correct grammar, spelling, syntax, and sentence structure
  - Demonstrates an ability to interpret, evaluate, and create visual representations of ideas
  - Communicates scientific knowledge in written, graphical, and oral format and recognize importance of accurate reporting of methods and data for replication studies
- Autonomy
  - Demonstrates an ability to work independently and identify when guidance is needed
  - Accepts constructive criticism and uses feedback effectively
  - Uses time well to ensure work gets accomplished
  - Works collaboratively toward shared research goals
- Ability to Deal with Obstacles
  - Is not discouraged by setbacks or unforeseen events and perseveres when challenges are encountered
  - Shows flexibility and a willingness to take risks and try again
  - Troubleshoots problems and searches for ways to do things more effectively
- Critical Thinking and Problem Solving
  - Uses a reflective and iterative approach to problem solving
  - Looks for the root causes of problems and develops or recognizes the most appropriate corrective actions
  - Recognizes flaws, assumptions, and missing elements in arguments
- Project Knowledge and Skills
  - Displays knowledge of key facts and concepts
  - Displays a grasp of relevant methods and is clear about how these methods apply to the research project

    - Demonstrates an appropriate mastery of skills needed to conduct the project
- Ethical Conduct
    - Shows understanding of the importance of principles of Responsible Conduct of Research (RCR)
    - Follows the APA Code of Ethics in the treatment of human and nonhuman participants in the design, data collection, interpretation, and reporting of neuroscientific research and follow proper biosafety procedures

Required Course Materials
There is no textbook for this class.

Student-Faculty Expectations
We expect that you will communicate with your research mentors in a timely manner and be responsive on Slack and/or email.

Time Commitment: Students must meet the weekly time expectations based on credit hours. For each research credit hour, students are expected to dedicate 3-4 hours per week, on average, to their research tasks. For example:
- 1 credit hour: 3-4 hours/week
- 2 credit hours: 6-8 hours/week
- 3 credit hours: 9-12 hours/week

Make sure to discuss the specific expectations for your project, time commitments, and end of semester deliverables with your mentor at the beginning of the semester.

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 here: https://catalog.gatech.edu/rules/22/

Grading Policy
Research grades will be determined based on student effort and communication throughout the semester. Each student will discuss specific duties and deliverables with the research mentor at the start of the semester, and students will not be penalized for not achieving goals due to circumstances beyond their control (e.g., experiment optimization, protocol approval delays, etc.). Grades will be assigned a letter grade according to the following breakdown:

Time Commitment & Reporting (70%) - Meet required weekly committed research hours (proportionally graded: i.e., time committed/time required * 70%)

Communication (10%) - Timely and professional communication with research mentors.

End of Semester Deliverables (20%) - Written semester report (4 pages) documenting your experiences and what you learned over the semester. Will include code, data, reports, documentation, and reflections as appropriate for the research topic. Due at 5pm ET on the last day of class.

Attendance Policy

Undergraduate research students will participate in research activities on a weekly basis commensurate with registered credit hours (detailed above) and as discussed with their research mentor. This includes all in-person or remote lab work, meetings, readings, writing, and any other work that is directly related to the student's role in the lab.

Academic Honesty/Integrity Statement

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 for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (404-894-2563) 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.

Campus Resources

The Undergraduate Research Opportunities Program (UROP) provides resources and support for undergraduate research students and their mentors. Visit https://undergradresearch.gatech.edu/ or contact UROP at urop@gatech.edu for more information.