

GEORGIA INSTITUTE OF TECHNOLOGY
SCHOOL OF ELECTRICAL & COMPUTER ENGINEERING
Syllabus: ECE4903 [Durgin] ORS Fall Research Project

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Unscheduled

Course Websites: Canvas

INSTRUCTOR INFORMATION:

Instructor

Prof. Gregory D. Durgin

Email

durgin at gatech.edu

Office Hours & Location

TBD, Van Leer 507

COURSE INFORMATION

Description

This course leads students through the Fall term of an ORS research project with expanded deliverables involving lab notebooks, research summaries, and preliminary research reports for a final 3-credit course grade. Students learn about the research process by performing a team research project embedded in a Georgia Tech laboratory, shepherded by a PhD mentor.

Prerequisites

Students will have completed at least one academic year in ORS (for pay or credit) before taking this course.

Course Goals and Learning Outcomes

Students will develop technical depth and expertise in electrical engineering, relevant to their laboratory exploration. Additionally, students will gain experience and knowledge in research conduct, laboratory notebook preparation, team collaboration skills, oral and written technical communications, and proposal preparation.

Graded Components

Assignment	Weight	Assignment	Weight
Qualified Laboratory Hours	50%	Laboratory Notebook	10%
Research Round Table	05%	Preliminary Research Proposal	15%
Workshop Attendance	05%	Mentor Evaluation	10%
Research Summary	05%		

Description of Graded Components

Qualified Laboratory Hours (QLHs) are hours spent working on your research project, most of which will likely be in the student's host laboratory. QLHs are graded for completeness (it is expected that at least 6 hours of lab/research work, on average, are logged weekly) and quality, based on mentor evaluation of the work. Other graded assignments include a laboratory notebook (written or electronic), research summary, and preliminary research proposal. Participation in the research project evaluation, poster and presentation, and attendance in at least 2 workshops, plus 1 advanced workshop designed for returning ORS research students will be required for a complete grade. Finally, a mentor evaluation of the student efforts and performance on their research team will contribute to the final grade.

Note: A student receiving 6CSP credit for ORS may not use their ORS research summary (or any other *graded* ORS assignment) to satisfy the writing assignment requirement for ECE Professional Communications. In this case, an alternative document must be used, which may or may not be related to ORS. Alert Prof. Durgin and your ECE professional communications instructor for more guidance.

For all assignments and projects, late work is not accepted. Special accommodations can be made for medical emergencies, interviewing, and other important events, but only if sufficient advance notice is given to (and permission granted by) the instructor ahead of time.

Grading Scale

This course uses a traditional A (>90.0), B (>80.0), C(>70.0), D(>60.0), F(<60.0) grade scale unless special circumstances require a curve to achieve the recommended course GPA as specified by the ECE course catalog, which should be between 3.3 and 3.5, inclusive. Grades can only be curved upward, not downward.

Classroom Management

The meetings and laboratory hours for this course are unscheduled. A schedule for mandatory workshops, seminars, and other ORS milestones will be provided at the beginning of each semester.

COURSE MATERIALS

Course Text:

No formal course text. Notes, readings, and assignments will be disseminated through T-square.

COURSE EXPECTATIONS & GUIDELINES

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, visit <http://www.catalog.gatech.edu/policies/honor-code/> or <http://www.catalog.gatech.edu/rules/18/>. Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Collaboration & Group Work

It is expected that each student upholds the Georgia Tech honor code when preparing work for this class. Everyone must turn in their own work (or group's work where specified) without contribution from another person or source.

Accommodations for Individuals with Disabilities

If you are a student with learning needs that requires special accommodation, contact the Office of Disability Services at (404)894-2563 or <http://disabilityservices.gatech.edu/>, as soon as possible to make an appointment to discuss your special needs and to obtain an accommodation letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations

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. See <http://www.catalog.gatech.edu/rules/22/> for an articulation of some basic expectation 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.