

CSE 8801 RCE Syllabus

Readings in Cardiac Electrophysiology: Computation, Experiment, and Theory, Section 01, 1 Credit
Fall 2026

Instructor Information

Instructor	Email
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General Course Information

Description

This course is focused on reading, analyzing, and critiquing original research papers in the broad area of cardiac electrophysiology. Literature selections ranging from state-of-the-art research to pioneering work that forms the basis for later sub-fields and important methodologies will be covered. Students will gain experience reading scientific papers, evaluating their contributions, and placing the work in context, as well as selecting papers and presenting and critiquing their content for a multi-disciplinary audience. Topics related to computation, experiment, and theory will be covered, along with relevant clinical areas.

Course Learning Outcomes

Articulate the strengths and weaknesses of the study design, methodology, and presentation of original research papers in the broad area of cardiac electrophysiology, including computational, experimental, theoretical, and clinical approaches.

Interpret cardiac electrophysiology research literature within the broader research context.

Present the motivation, methods, results, context, and significance of a cardiac electrophysiology research paper.

Required Course Materials

No textbooks will be required; instead, the course will be based on original research papers from the scientific literature.

Grading Policy:

Presentation 50%; Participation 50%.

Pass: $\geq 70\%$; Fail: $< 70\%$.

- Presentation, 50%
- Participation, 50%

Description of Graded Components

Presentation (50%): You will be required to present and lead the discussion of an original research paper during the semester.

Class participation (50%): Your participation will be an integral component of the class. Attendance and general participation during class will be considered.

USG Required Course Policies

Attendance and/or Participation

This will be an active classroom where you will be expected to participate. Thus, attendance and participation will be factors in your grade.

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. Review [Georgia Tech's Honor Code](#) and the student [Code of Conduct](#).

Any student suspected of cheating or plagiarism 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.

Additional Georgia Tech Required Policies

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.

Student-Faculty Expectations Agreement

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.