BMED 8813 NBD: Special Topics

Fall 2026

Georgia Institute of Technology

Instructor: Anqi Wu
Department: Department of Biomedical Engineering
CRN: 91098
Course Format: Seminar / lecture-based special topics course
Meeting Time/Location: [To be announced]
Office Hours: By appointment
Email: awu36@gatech.edu

Catalog Description

Topics of current interest in biomedical engineering.

Course Overview

This course covers advanced topics of current interest in biomedical engineering. The course is intended for graduate students and advanced undergraduate students with appropriate background. Emphasis will be placed on foundational concepts, recent research developments, and critical discussion of current literature in biomedical engineering and related areas.

Learning Objectives

By the end of the course, students are expected to:

- understand key concepts and methodologies in the selected topic area;
- analyze and critically evaluate recent research literature;
- apply computational and analytical approaches to biomedical problems;
- communicate technical ideas effectively in written and oral forms;
- identify open research challenges and opportunities.

Course Topics

Specific topics will vary depending on the focus of the offering, and may include:

- computational modeling in biomedical systems;
- neural and behavioral data analysis;
- machine learning in healthcare and neuroscience;
- biomedical signal processing;
- emerging methods and interdisciplinary approaches.

Course Activities

Course activities may include:

- lectures and discussions;
- reading and presenting research papers;
- assignments or technical exercises;
- a final project, report, or presentation.

Assessment

Grades may be based on:

- Class participation and discussion: 15%
- Assignments or reading summaries: 25%
- Presentation: 20%
- Final project or report: 40%

Expectations

Students are expected to attend class regularly, complete readings and assignments on time, and actively participate in discussions. As a graduate-level course, students should be prepared to engage deeply with current research literature.

Attendance and Communication

Regular attendance and participation are expected. Students should monitor course communications and reach out with questions as needed.

Late Work

Late submissions may be penalized unless prior arrangements have been made. Specific policies will be communicated during the semester.

Academic Integrity

All students are expected to comply with the Georgia Tech Honor Code. Proper citation and attribution of all sources are required.

Accessibility and Student Support

Students requiring accommodations should contact the Office of Disability Services and notify the instructor early. Georgia Tech provides additional academic and wellness resources.

Institute Policies

All Georgia Tech policies regarding academic conduct, non-discrimination, accessibility, and student behavior apply.

Note: As a special topics course, the exact content and structure may vary. Additional details will be provided at the beginning of the semester.