

ME6746 Syllabus

Rehabilitation Engineering, ME 6746, 3 Credits

Fall 2026

Instructor Information

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General Course Information

Description

Rehabilitation engineering is the systematic application of engineering sciences to increase the function and independence of persons with disabilities. Students will engage in research and development activities consistent with the assistive technology industry. The class includes both lecture and lab hours.

Course Learning Outcomes

- Students will gain a fuller understanding of functional limitations as applied to everyday life
- Students will undertake multiple product development activities with a focus on assistive technology, including Marketing and Predicate Technology Assessment, Product Development Economics, and Prototype performance evaluation and Conceptual design.
- Students will apply engineering, biomechanics and disability-related human factors to product design.

Required Course Materials

ME6746 does not have a text book but will use resources and articles that are available via GT Library and other avenues

Canvas will be used to provide course resources, define assignments and submit assignments. The Files folder will contain assignments and PDFs of the lectures.

Grading Policy:

Grading will be based on the Georgia Institute of Technology system (A B C D F) using a traditional categorization of 90, 80, 70, 60. However, grading will also respect the uncertainty of grading so natural separations in scores are taken into account.

Class deliverables & grading	Points
Training completion	5
Market Assessment and Predicate technology- presentation	5
Market Assessment and Predicate technology- report	15
Performance Testing test method- presentation	5
Performance Testing test method	5
Performance testing presentation	5
Performance testing report	15
Design Specification Document	10
AT device- final design- presentation	5
AT device- final design	20
Peer review – performance testing	5
Peer review: design	5

Description of Graded Components

Deliverables and assignments are a mix of written work and presentations. Each assignment will have details about deliverables posted on Canvas. If you have questions, please ask for clarification about assignments. Two peer review assignments will cover group assignments. These are required so if peer reviews are not submitted, no credit is given

Course Policies

Attendance and/or Participation

As a Graduate class, you are expected to attend and participate in class activities and discussions. I fully recognize that you may not attend all classes, but you are responsible for the content offered if you are absent. Class attendance will not be monitored; however, the lack of attendance clearly impacts class participation, so the more you miss class, the less you have the opportunity to participate. Being late for a day on which you present represents poor planning and a lack of respect for one's audience. You will not get full credit if you are late on your presentation day.

Please do not come to class if you are ill. If you have a fever, stay home and heal. If you have a mild cough, please wear a mask.

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.

Core IMPACTS

[Core IMPACTS](#) is the University System of Georgia's General Education curriculum. If you are teaching a course that counts towards Core IMPACTS, you should include a syllabus statement about the Core area and associated [career competencies](#). [This resource](#) developed by the Center for Excellence in Teaching and Learning and Online Education at Georgia State University includes template syllabus statements for each of the Core IMPACTS areas that you may adapt for your course.

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.

Collaboration, Group Work, and Use of Generative AI

As noted, grading includes group assignments, consistent with the objectives of the class. Group assignments closely reflect typical situations of industry-based engineers and product developers. Managing group dynamics is not often easy and attempting to equally distribute effort can be difficult. I will attempt to monitor group assignments paying attention to situations where unequal workload results. However, you are also responsible for insuring a judicious balance of effort and are responsible for notifying me in cases where I should intervene.

The class includes two Peer Review assignments that attempt to measure group contributions

You may use generative AI platforms to help generate ideas and brainstorm. In fact, some assignments include requirements to use Generative AI. Please attend to the requirements to document its use. Be aware that the material generated by these programs may be inaccurate, incomplete, otherwise problematic. Per GaTech's Honor Code, you may not submit any work generated by an AI program as your own. When including material generated by an AI, program, it should be cited like any other reference material. See this article for how to cite AI properly: How to cite ChatGPT <https://apastyle.apa.org/blog/how-to-cite-chatgp>

Extensions, Late Assignments, & Re-Scheduled/Missed Exams

The assignment sheet and CANVAS site defines due dates and submission windows. While some assignments have firm deadlines, other assignments can be submitted late without penalty.

Student Use of Mobile Devices in the Classroom

You are Graduate students- you may do whatever you please as long as you are not disruptive

Campus Resources for Students

Multiple assignments require reading that are available from the GT Library. You should become familiar with obtaining articles and other resources through their system. Multiple training opportunities exist, and you are encouraged to utilize them.