

ME4863/BMED4853 Syllabus

Emerging Technology Law 2-2-0-3

Lectures: Monday & Wednesday, 9:30-10:20am (Engineering Science and Mechanics 212)

Studio: Tuesday, 3:30-5:25pm (Online)

General Information

This course informs students of the legal structures that govern the development and introduction of emerging technology. Two main areas will be considered: product liability and intellectual property. The course will focus on the engineering components of litigation involving emerging technology. Topics in product liability include hazard analysis, human subject testing, child endangerment, medical products, and industry standards. Intellectual property topics will include patent infringement, patent invalidity, trade secrets, and the International Trade Commission. The role of engineering experts within the legal process will be a primary focus. Students will work both individually, and in teams, to conduct engineering analyses and construct legal arguments in response to various case studies involving accidents and accusations of intellectual property violations. Guest lecturers will include engineering expert witnesses and practicing attorneys.

Pre- &/or Co-Requisites

For ME students, ME2202 Dynamics of Rigid Bodies, ME 2110 Creative Decisions and Design

For BMED students, BMED 2310 Introduction to Biomedical Engineering Design

For Other Majors, Instructor approval

Course Topics:

1. Structure of legal system
2. Relationship between engineering and law
3. Hazard analysis
4. Product liability – defects, failure to warn, medical products
5. Industry standards
6. Human testing
7. Geometry and kinematic of child endangerment
8. Calculating injury potential of products
9. Product liability litigation
10. Intellectual property
11. Types of IP litigation
12. Patent invalidity
13. Technical expert witnesses

Course Objectives:

Objective 1: To provide students an understanding of how the legal system controls and limits engineering activities

Objective 2: To teach engineering methods that are used within the legal system

Objective 3: To teach students best engineering practices that satisfy legal requirements

Objective 4: To teach students proper methods for product testing

Objective 5: To teach students methods of establishing and continually protecting intellectual property (offensive IP strategies)

Objective 6: To prepare students to defend against IP litigation (defensive strategies)

Objective 7: To provide students an understanding of the career opportunities available to engineers within the legal community

Course Requirements & Grading

Studio Summaries: 35%

Exams: (15%+20%) 35%

Mock Trials (Team grades): 15%

Mock Trial Summary Motions (Individual grades): 10%

Peer Review/Class Participation 5%

Graduate Students: Case Review and Strategy Plan (+10%)

Course Format

The course will consist of two 1 hour lectures a 2-hour studio period each week. During the studio, students will put into practice the materials taught during lecture. The course will be delivered in a hybrid format such that any in person activities can also be accessed online.

Weekly Studios

Week #	Studio Topic
1	NA
2	Searching Legal Sources & Modeling the Law
3	Improving Engineering Impact
4	Hazard Analysis
5	Product Liability - Medical Products
6	Industry Standards
7	Product Recalls
8	Mock Product Liability Trial
9	Prior Art Searching
10	Medical Products IP
11	Patent Invalidity
12	Judicial Blunders
13	Mock IP Trial

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, please 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.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodations, 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 faculty as soon as possible in order to set up a time to discuss your learning needs.

Collaboration & Group Work

Some of the course project deliverables are to be submitted as a team. Students are encouraged to seek advice and guidance from people and learning materials outside of the class. Students will be required to submit peer-evaluations as individuals to score the contribution from themselves as well as their team members.

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. See <http://www.catalog.gatech.edu/rules/22/> for an articulation of some basic expectation that you can have of faculty and that faculty have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, we encourage you to remain committed to the ideals of Georgia Tech while in this class.

Campus Resources for Students

Visit this page https://ctl.gatech.edu/sites/default/files/documents/campus_resources_students.pdf for a list of relevant campus resources available to Georgia Tech students.

Covid-Related Guidelines

The most up-to-date information on Covid-19 is on the [TECH Moving Forward](#) website and in the [Academic Restart Frequently Asked Questions](#).

CARE Center, Counseling Center, Stamps Health Services, and the Student Center

These uncertain times can be difficult, and many students may need help in dealing with stress and mental health. The [CARE Center](#) and the [Counseling Center](#), and [Stamps Health Services](#) will offer both in-person and virtual appointments. Face-to-face appointments will require wearing a face covering and social distancing, with exceptions for medical examinations. Student Center services and operations are available on the [Student Center](#) website. For more information on these and other student services, contact the Vice President and Dean of Students or the [Division of Student Life](#).