BMED 9000 Syllabus

Doctoral Research, KEY, 3

Summer, 2026

Instructor Information

Instructor: Yonggang Ke

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General Course Information

Description

Research for PhD candidates in Biomedical Engineering. The course will provide the PhD candidates training, learning and research opportunities, with special focus on DNA nanotechnology and biomolecular engineering.

Course Learning Outcomes

- Develop skills for understanding and articulating fundamental knowledge and skills in biomolecular engineering.
- Develop skills for reading and reviewing literatures independently and critically.
- Develop skills for proposing and articulating well-developed research questions.
- Develop skills for preparing and performing comprehensive scientific presentations.

Required Course Materials

No formal course materials are required.

Grading Policy:

Students will be graded based on the performance in research, and their attendance in lab.

Assignments

- Lab attendance, 30 percentage/points towards grade
- Research progress, 70 percentage/points towards grade

Description of Graded Components

The students are expected to appear in lab in accordance with the lab policy. This includes appearance in lab during regular hours, attending meetings and other lab-related activities on time.

The research progress will be evaluated based on multiple factors, including the quality of experimental data, the quality of research presentations in group meetings, one-on-one meetings, etc., the student's development as a researcher (e.g., scientific critical thinking, experiment design, etc.).

Course Policies

Attendance and/or Participation

Students are expected to work in lab for 40 hours/week, in accordance with school policy. Absences are permitted as long as proper reasons have been provided in time.

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.