**BMED 7004 Teaching & Research Practicum I**

Prerequisites

Required for all doctoral students in the joint Georgia Tech/Emory PhD Biomedical Engineering program. All regular PhD students within the joint GT/Emory BME program will take this course during their first semester as a teaching assistant, typically the Fall of the second year. All joint GT/Emory/PKU PhD students (who are PKU-based) will take this course while on the Atlanta campus.

Course Objectives

This course is designed to provide students with the practical frameworks for understanding challenges faced during their teaching assistantship. The course provides training in issues related to teaching, such as grading, strategies, communication with students, etc. The course also provides 8 hours of topical materials required for GT Responsible Conduct in Research (RCR) compliance for doctoral students, as well as partial fulfillment of the program-specific content in Scholarly Integrity required by Emory’s Laney Graduate School. Experts from the BME Department, CETL, and other resources will be recruited.

Instructor:

Shannon Barker, PhD

Director of Graduate Training

[Shannon.barker@bme.gatech.edu](mailto:Shannon.barker@bme.gatech.edu)

Office: UAW3106

Textbooks:

* BG Davis, *Tools for Teaching 2nd ed*, Jossey-Bass publisher, ISBN-10: 0787965677

Course website: T-Square

Attendance

Mandatory. Students must sign in to each class. One unexcused absence is allowed per semester. Excused absences must be approved in advance. Absences may be made up prior to finals week by attending other seminars or lectures on materials related to topics missed in class and must be pre-approved by the instructor. Possible resources include Emory PSI 610 and CETL seminars/workshops.

BMED 7002:

Topics covered:

1. What to expect as a TA, Managing a classroom
   1. Workload
   2. Kinds of responsibilities
   3. Large vs small classes
   4. Types of classes
   5. Obtaining respect
   6. Working with your instructor
   7. Managing students’ expectations and concerns
   8. Student ethical conduct
2. Grading/Feedback: Strategies and rubrics
3. Grading/Feedback: Challenges to grades, giving useful feedback
4. Teaching strategies: Exam reviews and recitations
5. Teaching strategies: Project-based classes (Instructor with project-based class)
6. Teaching strategies: Teaching laboratory classes (Essy)
7. 2 Microteaching modules
8. RCR Topics:

* Responsibilities of mentors and mentees
* Authorship and publication
* Collaborative research
* Vertebrate animal research
* Human subjects research
* Peer review
* Conflicts of interest
* Data management

Grading:

For a grade of Satisfactory, a student must adequately complete all of the following by their individual deadlines.

1. Must complete Teaching Assistant Expectations Form for assigned course (along with Instructor for course student is TAing for)
2. Class attendance (only one unexcused absence)
3. Participating in class discussions (as determined by Instructor)
4. Microteaching participation and grading (must score an average of “Average” for each criterion in Microteaching Rubric)
5. Must complete Teaching Assistant Evaluation Form (along with Instructor for course student is TAing for)
6. Must score an average of 3 for each criterion in the Evaluation Criteria Rubric

Consequences of Unsatisfactory Grade

* If Unsatisfactory is due to poor performance on the Evaluation Rubric
  + One-on-one training with CETL
  + Additional semester of TA obligations and enrollment in 7004/7005 as appropriate
* If Unsatisfactory is due to failure to complete or turn in assignments (participation, forms, etc)
  + Required to attend at least two CETL time management workshops at which point grade made be changed to Satisfactory if all other class components were completed adequately.