

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Electrical Engineering and Computer Science Graduate Students Association

THIRD ANNUAL TA WORKSHOP — “TACRACY”:
EFFECTIVE TEACHING STRATEGIES FOR TAs, BY TAs

Monday, January 29 through Wednesday, January 31, 2007
5:30 p.m. – 7:00 p.m., Room 34-401B

Overview

Anxious about teaching for the first time? Don't worry! Welcome to the Third Annual EECS TA Workshop, which provides insight into effective strategies that would help graduate students fare well in their duty as a Teaching Assistant (TA). Focus group-style discussions will revolve around topics that are relevant to all TAs, regardless of the subject. Participation from veteran TAs will help one to benefit from the experience of TAs who've been there and done that. Dinner is provided.

If you have any comments about EECS GSA or the workshop, please feel free to contact us at eeecs-gsa@mit.edu.

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TA Workshop Hosts: Demba Ba (demba@mit.edu), Stephen Hou (shou@mit.edu)

TA Volunteers: Anthony Accardi, Tom Baran, Farinaz Edalat, Saikat Guha, Zahi Karam, Al Kharbouch, Alex Moore, Asfandiyar Qureshi, Melanie Rudoy, Shawn Staker, Ben Vandiver, Sy Bor Wang, Dennis Wei, David Wentzloff, Bernard Yen, Laura Zager.

Schedule

The Workshop is divided into three evenings, each of which is focused on a particular aspect of TAing. All are held from 5:30pm to 7pm in room 34-401B. All sessions are independent; you may attend/miss any of the sessions.

Case scenarios relevant to the day's topic are at the end of this handout. These scenarios and topics are by no means the only nor the most important issues to consider as a TA. However, we hope that they will help get the conversations started.

Monday — Managing the TA Duty

How do I do well in my classes, get research done, and at the same time do a good job TAing, all in the same term? As a head TA, how do I do my job best?

Tuesday — Helping Students Learn Best

What can I do to ensure that my students learn the material? How do I write good problem-set problems? How do I balance individual work with collaboration? What are good uses of office hours? How do TAs best give their students feedback?

Wednesday — Teaching Tutorials

How is recitation different from tutorial? What does it mean to run a good tutorial? How do I encourage my students to interact with me and with each other? What do I do if no one seems to know what's going on?

Online Resources

- EECS Graduate Students Association (GSA). We will soon post this handout on our website. Check for updates!
<http://web.mit.edu/eecsgsa/www/eecs-gsa@mit.edu>
- EECS TA Memo
<http://www.eecs.mit.edu/grad/tamemo.html>
- TA Guide on EECS GradBook (MIT certificates required)
https://eecs-gradbook.mit.edu/index.php/EECS.TA_Guide
- Hints on Applying for a TAship (by Prof. Michael Ernst)
<http://pag.csail.mit.edu/~mernst/advice/ta-application.html>
- HKN Tutoring Program for EECS
<http://hkn.mit.edu/act-tutoring.html>
- MIT Graduate Policies and Procedures: Financial Assistance: RA/TA Appointments
<http://web.mit.edu/gso/gpp/assistance/rata.html>
- MIT Teaching & Learning Laboratory
<http://web.mit.edu/tll/>

Scenarios for Group Discussion: Monday: Managing the TA Duty

1 Time Commitment

The semester just started and you are overwhelmed. You're taking two subjects, finishing your master's thesis, taking your RQE, and TAing a major subject. How do you manage your time? How do you do a good job, have the students like you, and not let TAing take over your whole life for a semester? How much time will you really spend as a TA in MIT EECS?

2 Students go to your office outside of office hours

You are working late in your office due to a paper deadline the next day. Then, at 11 p.m., three of the students in the subject for which you are the only TA appear at your office and frantically ask for help on the problem set, which is also due tomorrow. They are diligent students who always keep up with the material, but this problem set is particularly difficult. Although you feel bad about turning them away, you really need to do your own work right now. What do you say?

3 Head TA management

You are the head TA for a large undergraduate subject, and the professor in charge has made it clear to you that he has no time for managing the class, so everything is up to you.

What are some ways in which the work can be efficiently and fairly split up among the TAs? How much work should you ask your fellow TAs to finish even before the term starts? What do you do if a fellow TA is doing a very sloppy job with producing homework or solutions?

You get the feeling that your fellow TAs do not like teaching and view TAing as a chore. How can you convince them to do their work? What do you get out of TAing?

4 Student is suspected of altering answers on graded exam

A student asks for a regrade on three of the six problems on his exam. You look over his exam and suspect that he altered his answers after the exam was handed back. Unfortunately, you did not make a photocopy of his exam beforehand. What do you do?

5 Plagiarism

For the first homework assignment, two of your students turn in identical problem sets. You talk to them privately, and they claim that they misunderstood the collaboration policy. You give them the benefit of the doubt, so you give them full credit for the assignment, but you clearly state that what they did was unacceptable. On the second homework assignment, they again turn in identical work. What do you do?

6 Student asks out TA

You suspect one of your students has a crush on you. She sits next to you during every lecture, and even though she seems to be acing the homework and exams, she still goes to all your office hours and likes to chat with you every chance she has. At the end of office hours one day, she asks you whether you'd like to go out to dinner sometime. What do you do? Does it make a difference whether (a) other people are present, and (b) her feelings are reciprocated?

Scenarios for Group Discussion: Tuesday: Helping Students Learn Best

1 Collaboration policy

The professor in charge delegated to you the responsibility of articulating the collaboration policy on homework. What kind of policy strikes a balance between collaboration, which is a valuable learning tool, and individual work, which is the basis for how students are graded?

2 Writing problem-set problems

You are in charge of writing the next problem set. However, every problem you can think of is either too easy and mindless, or too time-consuming. What makes a problem-set problem “good”? How can I write problems that are (1) interesting, (2) useful, (3) educational, and (4) reasonably easy/difficult, all at the same time? What is the relationship between problem-set problems and exam problems?

3 Homework help in office hours

During office hours, your students seem to be doing nothing more than fishing for easy answers to homework. How can you help lead them in the right direction without giving them “too much” help?

4 Office hours overload

The subject you are teaching is very difficult, and your office hours are too packed with students for the sessions to be useful. You are already holding six hours of office hours per week. How can you use office hours and other resources more effectively and efficiently?

5 Giving feedback

Your students complain that they receive nothing but numerical marks on their homework. How can you best give feedback (both individual and collective) to your students to maximize their learning? Conversely, how can you encourage your students to give you feedback on your teaching?

6 Quiz reviews

You’re in charge of running the review session for the first quiz of the subject you’re TAing. You remember all the bad review sessions you attended in your undergraduate days, and you want to do better. What’s the purpose of a quiz review session? How can it be structured? When should it be scheduled relative to the quiz, and how long should it be? What if some students can’t make it? How is it different from lectures, recitations, tutorials, and office hours?

Scenarios for Group Discussion: Wednesday: Teaching Tutorials

1 Recitation vs. tutorial

You are teaching a large undergraduate subject, where some staff teach recitations of twenty students each, while some other staff teach tutorials of five students each. What is the difference between a recitation and a tutorial? How can the teaching staff decide on a split such that the students get the most out of each style of learning environment?

2 Recitation and tutorial agenda format

How does a typical one-hour recitation and/or tutorial work? Is there a particular format for the agenda of the session that works particularly well?

3 Different levels of students

In one of your tutorial sessions, there are two extremely motivated students who are always on top of the material, but there are also two students who are desperately falling behind. None can make any other tutorial time. How can you teach such that the first two students are not bored and the second two students are not missing what you are saying?

4 Class participation

It's the third week of classes, and none of your students ever participate in your tutorial. No one ever asks or answers questions or talks to their classmates. How do you encourage more class participation? What about students who are embarrassed to ask questions?

5 The talkative student

There is always one or two students in your tutorial who feels compelled to demonstrate his/her knowledge of the class material at every possible moment by constantly monopolizing discussion or making nit-picky arguments. How do you handle such a student? Does it make a difference whether he/she is right or wrong most of the time?

6 Low attendance

Attendance at your tutorial has been decaying exponentially. What can you do to stop this? What should you have done in the first tutorial to prevent this?