

INFORMATION AND SUGGESTIONS FOR FACULTY TEACHING CLASSES WITH RECITATIONS

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This is a list of practical suggestions from the DOTE related to the teaching of large-lecture classes in the School of Mathematics at Georgia Tech.

1. INTERACTION WITH TAs

It is **EXTREMELY** important that you maintain regular contact with your TAs. This can take many forms, here are two.

Email communication. Send a DETAILED email to your TAs after EVERY lecture that includes:

- An outline of what you covered.
- What topics the TA should cover in the next recitation.
- A list of suggested problems that the TA can work (usually a list of exercises from the text).
- Notes about what concepts or problems students often find difficult, and suggestions of how to make these clear to the students.

Personal meetings. Meet once a week with your TAs as a group. During this meeting, provide the following information.

- The topics that will be covered in lecture for the coming week.
- What topics the TA should cover in the recitations in the coming week.
- A list (preferably printed) of suggested problems that the TA can work (usually a list of exercises from the text).
- Discussion about what concepts or problems students often find difficult, and suggestions of how to make these clear to the students.

YOU MUST ENSURE THAT YOUR TAs NEVER WALK INTO RECITATION WITHOUT KNOWING WHAT YOU EXPECT THEM TO COVER THAT DAY.

2. EXAMS AND THE GRADING SCHEME

- Low-level classes that have recitations must have exams during the term as well as a final exam. Two or three hour exams plus a final exam are recommended.
- Exams should incorporate questions that require work to be shown. These questions should be graded using a partial credit system, with short comments written on the exam to give the students feedback on what they did wrong.
- Short answer, multiple choice, or true/false questions may be appropriate for portions of an exam, but should not be a major component of an exam.

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- Additional evaluations in the form of quizzes or homeworks are often appropriate and helpful.
- The class must have a final exam, and this should take place during the officially scheduled final exam time for the course. Final exams should be kept for one year after they are given.
- It may or may not be appropriate to allow a notesheet or calculator on an exam, but “open book, open notes” exams are not appropriate in large-lecture classes.

3. GRADING AND TAs

It is appropriate to have the TAs help with the grading duties for the course, but the department guidelines on Instructor/TA expectations should be kept in mind. These include the following points.

- A typical graduate TA is expected to spend 12-14 hours per week on TA duties. These include 4 hours in class, 1 hour in MathLab, and 1 to 2 office hours per week, leaving approximately 5-6 hours for preparation and grading of both of their sections. Of course, the amount of grading will vary somewhat from week to week, but it is NEVER appropriate to ask a TA to spend a lot of time grading in a single week.
- TAs should always be given sufficient time to complete their grading duties. A minimum of five days should be allowed for the grading of any assignment.
- It IS appropriate for the lead instructor to share some of the grading burden with the TAs.
- It is NOT appropriate to ask TAs to write (create) an exam.
- It is important to ensure uniformity of grading across sections. One way to achieve this is to have a single TA grade a particular set of exam questions from all sections. The instructor can reserve one of the combination lockers in the Skiles building can be reserved, and it can be used to exchange exams between the TAs and the instructor.

4. MISSED ASSIGNMENTS, CHEATING, AND RELATED ISSUES

- It is advisable to xerox a random sample of the exams before returning them to the students.
- It is advisable to have the TAs take attendance at exams, in case a student with no record of an exam score later claims that they were present at that exam.
- If the use of calculators is allowed during an exam, be especially vigilant to avoid cheating. Many modern calculators are not only powerful but have communication abilities that can be abused during an exam. The use of all other electronic devices should be prohibited.
- Especially in large classes, there will be students who miss an exam. You should have some policy in place to deal with these cases. Be aware that students do miss exams for justifiable reasons. Some justifiable excuses are predictable beforehand, e.g., religious holidays that fall on an exam date.
- You *cannot* discuss a student’s grades with parents or anyone else without *prior written permission* from the student. A parent may call you on the phone and ask “how is my child doing in class?”, but you are not at liberty to discuss this with them!

- It is not advisable to try to handle cheating incidents on your own. Follow the procedures given in the Georgia Tech honor code.

5. THE SYLLABUS

Having a complete course syllabus in place at the beginning of the semester and sticking to the policies laid out in it can greatly reduce confusion during the term. At minimum, your course syllabus should include at the following material.

- Your name, office, office hours, email address, address for the course webpage or T-Square information.
- The teaching assistants' names, offices, email addresses, and (if possible) office hours.
- Textbook and topics or sections that will be covered in the text.
- A clear description of the grading scheme.
- Dates of exams. These can be identified as tentative, but students should know exactly how many exams there will be and a good idea of when they will be. Give your policy on missed exams.
- A link to the Georgia Tech honor code.

6. HELP!

There are many people in the department who are happy to help you with any issues or concerns regarding teaching that may come up during the term. Here are a few names—don't hesitate to contact any one of them with questions.

- DOTE: Chris Heil.
- Associate Chair: Fred Andrew.
- Undergraduate Coordinator: Doron Lubinsky.
- Graduate Coordinator: Luca Dieci.