

Best Work #2:
Selected Materials from the School of Math's 2019
New Faculty Orientation

Classes at Tech: Structure, Coordination, and Expectations

What class numbers mean

- 1 Coordinated undergraduate courses
 - 1551 (Differential Calculus), 1552 (Integral Calculus)
 - 1553 and 1554 (2 vs. 4 credit Linear Algebra)
 - 2550 and 2551 (2 vs. 4 credit Multivariable Calculus)
 - 2552 (Differential Equations)
- 2 Intermediate undergraduate courses (2000-3000 level)
- 3 Advanced undergrad / MS grad courses (4000-level, like undergrad Analysis I and MS-STAT core course Math 4261)
- 4 PhD-level courses (6000+).

Coordination

Coordinated courses have a course coordinator who sets the course policies and schedule, and most or all of the homework.

- Gives the students across different lectures a fair and uniform experience while reducing the burdens of teaching and administration for the instructors.
- Common syllabus between lectures (the coordinator will inform you what, if anything, can be modified).
- Send quizzes and exams to the coordinator for feedback.
- Consult the coordinator if administrative issues arise. They may help you handle it or refer you to the ADOTE (Chris Jankowski).
- The Course Repository has past resources available for download. The coordinator may have additional materials to share as well.

Teaching non-coordinated courses

- Don't be afraid to ask past instructors if they will share their resources.
- You can find past schedules and lists of instructors [here](#).
- If you are teaching a graduate course such as Math 6337 / 6338 (Analysis I/II) or Math 6121/6122 (Algebra I/II), you may be asked to assist in writing and grading the graduate written comprehensive exam for the subject, given at the beginning of each semester.

Student Evaluations

- Midsemester student surveys are mandatory for postdocs. You will receive a reminder to do a survey around the end of September, along with a sample template for doing an online survey through Canvas.
- End of semester student evaluations (CIOS) are administered online by Georgia Tech. The Institute very strongly desires high participation rates. Aim for an 85% or higher participation rate.
- High participation rates are difficult to get just by asking, so many instructors give “incentives” to increase student participation.
- **The CIOS incentive is so common that many / most students expect it.** Coordinated courses will have an incentive decided by the coordinator (such as an extra dropped quiz).

Expectations

In calculus and linear algebra courses, many students are freshmen, which means they are just a few months out of high school.

- Many students are accustomed to math as a series of rote computations. It is good to remind them that **university math is not like that**.
- Students expect a clear and organized syllabus.
- Generally, Tech students are hard-working and on the ball, willing to put in the time and effort necessary to do the homework and succeed.

Teaching Technologies Overview

Use your laptop and log in to <https://canvas.gatech.edu> using your Georgia Tech credentials.

If you do not have access yet, find a partner who does. Select one of your courses to open its Canvas page.

By navigating through one of your Canvas class sites, do the following and briefly write down the steps you used. Some are not as obvious as they seem.

1. Find a roster of your students that includes their photos.
2. Create a gradebook item titled "Sample Quiz" and save it but don't publish it.
(When creating real gradebook items during the semester, you should save *and* publish them.)
3. Combining sections: If you teach a lecture that has several sections, then each section will be listed as a different course on Canvas. Often, instructors will merge their sections together to create a single Canvas site for the entire lecture. If you are teaching a coordinated course, please wait for your coordinator's instruction for whether to combine or not combine sections. For now, read instructions for how to combine sections at <https://canvas.gatech.edu/combine-courses>. Use that link, do not use Google! Georgia Tech's method for combining sections is different than almost every other university, so googling for instructions may lead you nowhere.
4. Adding Teaching Assistants: instructors must add TAs or graders to Canvas in order for them to receive grading permissions. To do this, click on the "People" tab on the left column of your class's Canvas site and click "+People" there. TA assignments cannot be finalized until graduate students have been registered for classes, so you probably have not heard who your TAs will be. However, you will be informed who your TAs are by the first week of class.
5. Piazza: It is possible to create a Piazza forum for your lecture simply by clicking "Piazza" in Canvas and following instructions. If you are teaching a coordinated course, do not create a Piazza site until you have discussed it with the coordinator.

Gradescope

Gradescope is an online tool for grading quizzes and exams. Many instructors find that it makes grading and handing back exams easy (just a click of a button), it allows students to submit re-grade requests online, and it makes posting exam grades to Canvas easy (one click of a button in Gradescope).

Each Canvas course has a Gradescope tab on the left side. If you click the tab, you will be given the ability to use Gradescope for your class. Like any online grading tool, there are pitfalls to using Gradescope, but you might find it preferable to grading by hand. In Gradescope, creating a quiz or exam template and a rubric is mostly self-explanatory. Since Gradescope relies on the instructor uploading scanned exams with the pages in order, it is very important that students write their name or initials on each page (not just the first page) in case there is any mix-up with pages during the scanning process.

MyMathLab

MyMathLab (MML for short) is a site that allows students to read their textbook and do homework electronically in most calculus, linear algebra, and differential equations courses (1551, 1552, 1554, 2550, and 2551). Generally, the course coordinator will do most of the set up for you, so follow their instruction when the time comes. We will have a tutorial for MML later this week (Friday, August 16) with more details.

Crash Course Pop Quiz!

1. True or false: Georgia Tech requires a midsemester progress report for students in all classes.
2. True or false: You must submit a Verification of Participation report for all of your students by September 9.
3. True or false: You have the authority to register a student for your class or change their position on the waitlist.
4. Suppose you have strong evidence that a student cheated on an exam. Describe the recommended procedure for handling this case of possible academic dishonesty.
5. A student is badly failing your class, with a 30% for the semester. Two days before the final exam, they contact you asking for a grade of Incomplete. What is the appropriate course of action within the Georgia Tech rules and regulations?

Working with Teaching Assistants

Managing Teaching Assistants

- Provide clear instruction and expectations!
 - Create a rubric for the TAs to use when grading quizzes, homework, and exams.
 - Inform the TAs how to handle the studio (subjects and timing of quizzes, problems to cover in studio, topics to cover, etc.).
- Maintain regular contact with the TAs through:
 - Weekly meetings and(/or)
 - Frequent emails providing information about the course.
 - Coordinated classes will have a Head TA who will help distribute materials and communicate with all TAs in the course, but you should still keep in close contact with your TAs.

Managing Teaching Assistants, Continued

- Expected workload: 6–7 hours per week per class. This includes 2 hours in class, 1 office hour, 1 hour in Math Lab.
- TAs can be used to grade homeworks and quizzes. Give them sufficient time to grade, and keep their workload in mind—do not overload your TAs.
- TAs (and the Instructor!) can be expected to assist with grading exams and proctoring the final.
- If lecture starts on Tuesday, there is still a studio that Monday. The studio on Monday should be covered, perhaps with some practice or review problems.

Have a plan for exams

Coordinated courses and most lower-level courses have exams during studio, so make sure that your TAs are ready to proctor!

- Have a sign-in sheet (or other system in place) so that you have a record of all students who take the exam.
- TAs should actively proctor: walking around the room and keeping an eye out for questions, monitoring to prevent academic dishonesty.
- Give them an emergency contact in case something goes wrong. TAs do occasionally get very sick at the last minute or oversleep for an 8 AM studio. Have a backup plan and monitor the exam.
- Make sure your TAs know the course policies regarding absences and makeups. If they are unsure, they should refer the student to the instructor.

These are the questions sent to panelists for the "Working with TAs" and "Teaching at Tech" panels in the 2019 New Faculty Orientation.

Working with TAs

1. How frequently do you communicate with your TAs by email? Do you meet in person every week or every other week?
2. Do you give explicit instructions for how you want your TAs to conduct recitation? If so, what are they?
3. How detailed do you make your rubrics for quizzes and exams?
4. Logistics: Do you have your TAs print exams, or do you print them yourself? How do you work with your TAs to monitor cheating and take attendance during exams?
5. How do the above topics above if you are teaching a more advanced undergraduate course as opposed to first-year courses like calculus and linear algebra?
6. Do you have a story you'd like to share where things went terribly wrong and you had to work with your TA to fix the situation?

Teaching at Tech

1. How do you divide work among yourself and the TAs, and how often do you meet with them? The new faculty will have already witnessed a panel on Working with TAs, but I think this repetition will still help.
2. How much communication and guidance should an instructor expect from the coordinator in a coordinated course?
3. For advanced courses (4000-6000 level), instructors might feel isolated as the only instructor. What kinds of resources should they seek to help them prepare?
4. Do you have any general teaching tips or observations that come to mind based on your time teaching here? Comments on what to expect from students are certainly welcome here too.
5. If you have any particular resources (such as the Math Lab) that you have found useful or lacking for the students, it would be great for the new faculty to hear.
6. Do you have a story you'd like to share about a time when something went terribly wrong, and describe what you did to fix it?

** Monday, August 12th ** IN SKILES 202

Postdocs and New Faculty (Tenure Track and Academic Professionals):

9am Coffee
9:30am Welcome: Faculty Liaison for Postdoctoral Scholars (FLPS) (Christine Heitsch)
9:40am Classes at Tech: structure, coordination, and student expectations (Chris Jankowski)
10:00am "Crash course": Associate Chair for Faculty (Michael Lacey)
10:40am Break
10:50am Teaching Technologies (Canvas, MyMathLab, Oscar, Buzzport, CIOs, Piazza): Greg Mayer
11:20am Working with TAs overview (Chris Jankowski)
11:30am Working with TAs panel
TA Coordinator (Klara Grodzinsky)
International TA Program Coordinator & Associate Professor Josephine Yu
Language Specialist (Mo Burke)
12:15pm Lunch
1:00pm Teaching evaluations (Dan Margalit)
1:20pm Break
1:30pm Teaching@Tech panel
Associate Professor Greg Blekherman
Assistant Professor Galyna Livshyts
Academic Professional Neha Gupta
Postdoc JungHwan Park

** Tuesday, August 13th **

New Faculty (Tenure Track and Academic Professionals):

8am – 5pm GT New Faculty Orientation in the Global Learning Center

** Wednesday, August 14th **

Postdocs and New Faculty (TT and AP)

10:00am – 12pm Teaching technology clinic with Greg Mayer in Skiles 246 (please bring a laptop)

Postdocs and New Faculty (TT and AP)

2pm – 4pm New Faculty OHR Benefits Orientation in Clough Learning Commons, Room 152

** Thursday, August 15th**

IN SKILES 202

Postdocs and New Faculty (TT and AP):

1pm SoM overview: Chair (Rachel Kuske)
1:30pm Grad program overview: Director of Graduate Studies
(Xingxing Yu)
1:45pm Undergrad program overview: Director of Undergraduate
Studies (Guillermo Goldsztein)
2pm Coffee
2:30pm Staff introductions/responsibilities: Assistant
Director of Business Operations
(Kimberly Stanley-Jones)
2:45pm GT library services and MathSciNet: Math librarian
(Elizabeth (Liz) Holdsworth)
3pm Techworks (paychecks, benefits, travel): Assistant
Director of Business Operations
(Kimberly Stanley-Jones)
3:30pm Break
3:45pm SoM scheduling overview: Chris Jankowski
4pm Computing/IT Issues:
Director of Information Technology for
College of Science (Justin Filoleta)
IT Leaders for School of Math (Spiro
Nicolopoulos and Arian Padron)
4:30pm Teaching assessment
Faculty: Director of Teaching Effectiveness
(DOTE)
(Igor Belegradek)
Postdocs: Assistant DOTE (Chris Jankowski)

** Friday, August 16th ** IN SKILES 202

Postdocs, New, and Current Faculty:

9:00 - 10:00am MyMathLab (MML)/Learning Catalytics (LC) training
(Lyndsee Hewston from Pearson Publishing, and
Klara Grodzinsky)

A Crash Course in Teaching in the School of Mathematics at Georgia Tech

Main Points

Some key guidelines to keep in mind, so we don't get lost in details:

- Perform required administrative and teaching duties, *on time*.
- Utilize resources available to you (mentors, coordinators, etc.)
- Follow department policies for the syllabus, office hours, exams, grading, and academic dishonesty.
- Emphasize resources and important deadlines to students.

Mentors

- Course Coordinator: If you are teaching undergraduate calculus, linear algebra, or differential equations.
- DOTE: Oversees teaching evaluation for junior faculty (Igor Belegradek).
- Assistant DOTE: Oversees teaching evaluation for postdocs (Chris Jankowski).
- Teaching Mentor: This is the ADOTE your first year. Afterwards, choose one from among the tenure-track or tenured faculty. You are strongly encouraged to choose a teaching mentor who is someone other than your research mentor.
- Faculty Liason for Postdoctoral Scholars: Professional development, ranging from teaching to career advancement (Christine Heitsch).

Additional resources

- Associate Chair: Helps with anything, especially unusual situations (Michael Lacey).
- Director of Teaching Assistants: Assigns TAs, can assist in finding a last-minute replacement for a sick TA, and can be consulted if a TA is not doing their job properly (Klara Grodzinsky).
- Director of International Instructor Training: Helps international TAs adjust to the teaching expectations at Georgia Tech, and is a specialist for sharpening English skills. (Mo Burke)
- Graduate Director: An appropriate contact if a TAs conduct needs to be brought to serious attention. (Xingxing Yu)

Course Coordination

If you are teaching 1551-1554 or 2550-2552, a course coordinator will provide a syllabus satisfying school requirements, a grading scheme, and exam dates.

- Feel free to consult the coordinator for teaching advice and resources.
- Send your exams to the coordinator for feedback.
- The coordinator organizes the writing of the final exam, and you should consult them when deciding final letter grades.

Remember that *you* are responsible for your lectures, writing your quizzes and exams, communicating with your TAs, and everything else that accompanies the responsibility of being instructor of a lecture.

Key Guidelines in the Classroom

- You must have a syllabus. It needs to be made available on the course webpage and discussed/distributed in the first class.
- You must have posted office hours (minimum 2 hours per week).
- You must have midterm and final exams for the course.
- You must provide practice exams or practice problems for exams. In a coordinated course, the coordinator will provide these.
- Registration: You *cannot* help students get into your class in *any* form. Refer students to the [Permits and Waitlists](#) page.

Crucial Requirements

- FERPA: You *cannot* discuss the grades of a student with anyone but that student. Violating FERPA can have catastrophic consequences.
- Verification of participation, due September 9 at 4:00 PM. You just check a box for each student who has done any graded work.
- (1000-2000 level courses) You must have a graded exam before midsemester progress reports, which are due Sep. 30 at 12 PM.
- Final grades are due December 16 at noon.

Important Dates, Fall 2019 (*Critical dates are in red*)

Aug 10–23	Phase II Registration (TAs not yet finalized!)
Aug 19	First day of class
Aug 23	Last day to register, change schedule, or drop without W
Sep 9	Verification of participation deadline: 4 PM.
Sep 30	Progress Report deadline: 12 PM (1000-2000 level courses)
Oct 26	Withdrawal deadline (Last day to withdraw with W)
Dec 2–3	Final Instructional Class Days (more to come on this!)
Dec 5–12	Final Exams (with Reading Periods intermixed)
Dec 16	Grade submission deadline (Monday at 12 PM)
Dec 17	Grades available to students

End of the semester

- Final Instructional Days (Dec 2-3): *No tests or quizzes.* Homework, projects, or presentations are allowed *if explicitly listed on the syllabus.* No attendance quizzes if they count towards the grade. *Ungraded practice assignments are allowed.*
- Reading Periods: Designated days or partial days before and during final exams. *No graded activities of any kind are allowed.* Optional review sessions are allowed, but no credit *or extra-credit* may be attached.
- Final Exams: Aside from the final exam, no assignments of any kind are allowed during finals period.

Grades

- Progress Reports (Midterm Grades): A grade of “S” or “U” is assigned in 1000 or 2000 level courses for informational purposes only. A grade of U indicated that based on the work completed to that point the student’s standing is in the D or lower range.
- Before submitting your final grades:
 - Check historical [grade distributions](#) on the internal SoM page.
 - Review the grades with your course coordinator or teaching mentor.
- An incomplete grade (I) can be given if the student completes most of the work in the semester but has a health or other problem beyond their control. **In order to receive an incomplete, the student must have a passing grade.**
- If you need to make a grade change for a submitted grade, see Iris Hamilton in the SoM Office to complete a Grade Change form.

Office Hours and the Math Lab

- For Math 1551, 1552, 1553, 1554, 2551, and 2552: Graduate student instructors, postdocs, and graduate TAs in these courses will now schedule their course-specific office hours in the Clough building. [Stephanie Reikes](#) will send a sign-up sheet.

You *must* be present for posted hours. Anything otherwise can be considered breach of contract
- Office hours are not for “the answer.” This can be stated on the syllabus and communicated to the TAs. Students should be prepared to work through their questions with the instructor or TA during office hours.

Academic dishonesty and makeup work

- If an instance of academic misconduct happens in your course, **DO NOT ATTEMPT TO RESOLVE IT YOURSELF.** Document the instance as best as possible (summaries, copies of the work in question, etc.) and refer the incident to the [Office of Student Integrity](#).
- Makeups: Coordinated courses generally have pre-set policies that the coordinator will put on the shared syllabus. Keep in mind that if a student misses a quiz or exam due to an institute-approved absence, they *must* be allowed to take a makeup.

Resources for Teaching through CTL

- The CTL (Center for Teaching and Learning) serves as a faculty development center, by assisting faculty in their teaching and by administering the Course Instructor Opinion Survey (CIOS).
- Activities include [Tech to Teaching](#), [CTL Book Club](#), and [in class consultations](#).
- The CTL periodically adds online resources, such as [dealing with the unexpected](#) and [connecting across generations](#).
- CTL contact: [Carol Subino Sullivan](#), Assistant Director of Faculty Teaching and Learning Initiatives
- <http://www.cetl.gatech.edu/>

Resources for your Students

- **Office of Disability Services for Students.** Students receiving these services should provide you with documentation. Often, these students will take their exams at the Office of Disability Services (all you have to do is respond to the office's emails, send pdf of exam to them).
- The **Math Lab** opens one week after classes begin and closes the Thursday before finals begin. The School of Math offers free tutorial help in the Math Lab for most 1000 and 2000 level courses. The Math Lab is staffed by graduate and undergraduate teaching assistants.

Resources for your Students (continued)

The [Center for Academic Success](#) has links to academic coaching and other resources such as the following.

- [Time Management](#)
- [Study Strategies](#)
- Some coordinated courses have extra help available to students through [PLUS Sessions](#). The PLUS schedule is usually not announced until after the semester begins.

Resources for your Students (continued)

- **OMED Tutoring.** OMED provides free academic support services to ALL Tech undergraduate students.
- **1-to-1 Tutoring:** 1-to-1 Tutoring is a free, appointment-based tutoring program offered to all Georgia Tech undergraduate students by the Center for Academic Success.
- The **LGBTQIA Resource Center** has numerous events and [programs](#). The center also has [resources](#) to help students in crisis, victims of sexual violence, and more.

Mental health resources for students

- The Georgia Tech [Counseling Center](#) offers a variety of mental health services to students. It is common for instructors to include a link to the center on the course syllabus.
- The [best practices page](#) and the [distressed students guide](#) discuss how to spot students who need help and get them to the help they need.
- From the best practices page: “Remember to avoid making promises to keep shared information confidential. If the student appears to be in imminent danger of hurting self or others, contact the counseling center or the campus police immediately. Do not promise to keep threats to self or others secret.”
- A student with a severe crisis requiring immediate attention may speak with a counselor at any time, including after standard hours (Monday-Friday 8AM-5PM). See the [Students in Crisis](#) page.

Gradescope and Overleaf

- Gradescope is a tool for grading quizzes and exams online, and is available through Canvas. You may upload scanned student work, grade it, and send grades to the Canvas gradebook.
- [Overleaf](#) offers collaborative opportunities for working with \LaTeX online.

Some last reminders

- Georgia Tech has many bureaucratic requirements that it takes *very* seriously. If you fail to fulfill just one of them, it will create a major headache for you and for us.
- Follow all required course policies and be a conscientious instructor.
- Consult the course coordinator or ADOTE if you have any doubts.

Detailed online resources available

Go to:

GT Math homepage → About → Internal

You will need to log into the Internal site using your usual GT credentials. Next, **click on** and **read** the following documents:

- *TEACHING POLICIES*
- *POSTDOCTORAL TEACHING POLICIES*
- *INSTRUCTOR-TA INTERACTION POLICIES*
- *POLICIES FOR TAs*