MATH 1553 A & C: FALL 2017 SYLLABUS

This syllabus contains only the core course policies. Most course information can be found on the course website.

Information specific to sections A and C can be found on

the section website.

Announcements will be posted on Piazza, which can be accessed from T-Square. You must sign up for Piazza to receive course announcements.

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Textbook: *Linear Algebra and its Applications*, 5th edition, by Lay, Lay, and McDonald.

Course-level Learning Goals. By the end of this course, it is expected that students will be able to do the following.

- (1) Construct, and give examples of, mathematical expressions that involve vectors, matrices, and systems of linear equations.
- (2) Evaluate mathematical expressions to compute quantities that deal with linear systems and eigenvalue problems.
- (3) Analyze mathematical statements and expressions, for example to assess whether a particular statement is accurate.
- (4) Write logical progressions of precise mathematical statements to justify and communicate your reasoning.
- (5) Apply linear algebra concepts to model, solve, and analyze real-world situations.

Attendance. You are expected to come prepared to and actively participate in every lecture and recitation session. In the event of an absence, you are responsible for all missed materials, assignments, and any additional announcements or schedule changes given in class. Please show courtesy to your fellow classmates and instructor by adhering to the following class rules: unless otherwise directed, turn off all laptops, cellular phones, and all other electronic devices during class; come to class on time and stay for the entire class period; refrain from conversing with your fellow students; put away any reading materials unrelated to the course.

Attendance will be measured by responses to Piazza poll questions. Please bring an Internet-enabled device to class.

Recitation. In addition to lecture, there are weekly recitations. The first recitation takes place on Friday, August 25. Recitation attendance is mandatory. Quizzes and midterms will be given in recitation. See the section webpage for details about recitation sections.

Homework. Homework will be done online through WeBWorK, accessed through T-Square. Assignments are due weekly at **11:59pm on Wednesdays**. The two lowest homework scores will be dropped. Each homework assignment counts the same amount toward your grade. No late homework will be accepted, as the solutions are posted at 12:00am on Thursdays.

There will be a 3–5 page written assignment due after Thanksgiving. It counts as one homework assignment.

Quizzes, Exams, and Regrades. Starting the week of August 28, we will have a 15-minute quiz in almost every recitation. Your lowest quiz grade will be dropped. No books, notes, calculators, cell phones, or other electronic devices are allowed during quizzes and exams.

We will have three midterm exams, which take place during recitation on the following dates:

- (1) Friday, September 22 (make-up date for Rosh Hashanah: Monday, September 25)
- (2) Friday, October 20
- (3) Friday, November 17

Quizzes and exams will be handed back during recitation. There will be a brief period where all writing utensils must be put away and you can inspect your exam to make sure it was graded and tallied correctly. If you feel that a quiz or exam problem was graded incorrectly, you may then pull out a pen, circle the problem in question (do not write anything else on the exam), and hand it back to your TA immediately. After this period, no grade changes will be considered. Please note that even if you only have one problem which you want regraded, your entire quiz or exam is subject to a regrade.

The cumulative final exam will take place on Tuesday, December 12, 6pm–8:50pm. Only under extreme extenuating circumstances will you be able to take the final exam at a different time or date. Early travel plans (including already-purchased tickets) are not an acceptable reason for this.

Missed work policy. You may only make up missed quizzes or exams in the following circumstances.

- *Institute-mandated travel:* If you will miss any class days (including recitation) for Institute-mandated travel, you must give me official notice for all of them by the end of class on Wednesday, August 30.
- *Religious holiday:* By the end of class on Wednesday, August 30, you must notify me and your TA of any classes (including recitation) you will miss due to religious holidays.
- *Illness*: Except under extenuating circumstances, you must notify your TA in advance and have a doctor's note.
- Family emergency: Please have your academic advisor or the Dean's office contact me.

Otherwise, missed quizzes and missed exams result in a grade of zero.

If you will miss an exam, then you must notify me in advance (rather than your TA) and present a doctor's note in the case of an illness. In the case of Institute-mandated travel, you may take a makeup quiz or exam. For other excused absences for a quiz, the next quiz will count double. If you have an excused absence for an exam, then you may take a makeup exam on the Monday immediately following the exam. If this is not possible, then the weight for that exam will be shifted equally to your remaining exams (including the final exam).

Grading. The grade breakdown for the course is as follows:

- 5% Homework (two lowest scores dropped)
- 5% Class participation (as measured by responses to Piazza poll questions)
- 15% Quizzes (lowest score dropped)
- 15% Midterm exam 1
- 15% Midterm exam 2
- 15% Midterm exam 3
- 30% Final exam

The final exam score will be used to replace half of the lowest midterm score if you score higher on your final than on one of the midterms.

After all numerical grades have been computed, letter grades are assigned. The standard cutoffs are:

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A: [90%, 100%] B: [80%, 90%) C: [70%, 80%) D: [60%, 70%) F: [0%, 60%)
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So, to guarantee an A, you need to score 90% or better overall. The cutoffs *might* be adjusted, but only in the downward direction (e.g. 89% may end up being an A).

Email policy.

• *Check the syllabus and website first.* Office hours, locations, schedules, policies, etc. are available there.

- *No grade discussion by email.* Any questions about grades should be asked in person, during office hours or by appointment.
- *Math in person*. It is preferable (and much easier) to answer math questions in person. Asking on Piazza is also a great idea, since (a) lots of other people will probably have that question, and (b) you'll have 1,000+ other students who might be able to answer it.

Miscellaneous Policies.

- (1) Extra credit: there is none, as per course-wide policy.
- (2) *Calculators*: are permitted to check your work when doing your homework, but forbidden during quizzes and exams.
- (3) *T-Square grades*: please check that your grade entered online matches the grade written on your papers.

The Honor Code and Academic Dishonesty. Do not cheat! Abide by the honor code at all times. See http://honor.gatech.edu and the policy library. Any evidence of cheating or other violations of the Georgia Tech Honor Code will be submitted directly to the Dean of Students. Cheating includes, but is not limited to:

- (1) Using a calculator, books, or any form of notes on quizzes or tests.
- (2) Copying directly from any source, including friends, classmates, tutors, internet sources (including Wolfram Alpha), or a solutions manual.
- (3) Allowing another person to copy your work.
- (4) Taking a test or quiz in someone else's name, or having someone else take a test or quiz in your name.
- (5) Asking for a regrade of a paper that has been altered from its original form.

Students with Disabilities and/or in need of Special Accommodations. Georgia Tech complies with the regulations of the Americans with Disabilities Act of 1990 and offers accommodations to students with disabilities. If you are in need of classroom or testing accommodations, please make an appointment with the Office of Disability Services to discuss the appropriate procedures. More information is available on their website, http://disabilityservices.gatech.edu/.

Additional resources and tutoring. OMED tutoring and 1-to-1 tutoring offer free tutoring. If appointments are full when you are available, you may request additional tutoring. There is additional drop-in tutoring on the 2nd floor of the Clough Commons. A comprehensive list of tutoring resources is available at http://www.success.gatech.edu/tutoring-0. In addition, the Math Lab offers tutoring in Clough Commons 280.

For a more detailed list, see the help tab of the course webpage.

MyMathLab Course Information. Georgia Tech currently utilizes MyMathLab (MML) to give students joint electronic access to the Thomas *Calculus* text and the Lay *Linear Algebra* text.

MyMathLab Course ID: rabinoff91018

Important notes on MML:

- If you already have an account on MyMathLab using this combined textbook within the past 18 months, then you do not need to purchase a new code. Login to your account on MyMathLab, select the option to add a new course, and enter our course ID.
- If you already have a MyMathLab account that used either the Thomas or the Lay texbook in the past 18 months, but you were unable to add our course using the previous step, please send an email to Lyndsee.Hewston@Pearson.com and include the following information:
 - 1. Your First and Last Name
 - 2. The email address used to register for MML

- 3. Your Login ID for MML
- 4. Our course ID (listed above)

You should receive a reply within 36 business hours from the Pearson support team regarding your account status. In the meantime, you can access our course using the "temporary access" option when registering. Please do not pay for a new code until you receive a reply from Pearson.

- If you do not have a MyMathLab account using the Thomas or Lay textbooks, or if your account is over 18 months old, you will need to purchase a new code for our course. Please refer to the registration document, located in the "Resources" section on T-square, to create your new account.
- When signing up for MyMathLab, it will be immensely helpful if you will set your STUDENT ID to your USERID for the GT system (i.e., your T-Square USERID, as in "cjankowski3", etc).

MyMathLab comes with an entire electronic version of the textbook; it is your choice if you would also like to own the textbook in print. You may purchase a MyMathLab code either from the bookstore or on-line while registering at http://www.mymathlab.com. If you prefer to own a hardcopy of the text, the bookstore offers packages of MyMathLab combined with a loose-leaf or hardcover version of the Thomas textbook that is less expensive than purchasing the text and code separately.

PLEASE NOTE: GEORGIA TECH HAS A SPECIAL CODE PACKAGE THAT INCLUDES BOTH TEXT-BOOKS. THIS CODE CAN ONLY BE PURCHASED THROUGH THE CAMPUS BOOKSTORES OR DIRECTLY FROM PEARSON. CODES PURCHASED BY OTHER VENDORS WILL NOT WORK! Possible IS-BNs for this text are: 1323131760, 1323132112, 132313204X, 1323132104, or 1323132120.