Syllabus, Math 1553 (Introduction to Linear Algebra)
Chris Jankowski, Fall 2017

Office location and hours

Office: Skiles 261.   **Email**: cjankowski3@gatech.edu.
Office hours: Tuesdays 1:00-2:30 PM and Wednesdays 2:15-3:45 PM.
If none of these office hours are possible for you, let me know and we can arrange some other time to meet.

Textbook and calendar

Linear Algebra and its Applications, 5th edition, by Lay, Lay, and McDonald.
You will be able to purchase dual access to the electronic versions of our linear algebra textbook and Thomas's Calculus textbook on MyMathLab, once the semester begins. I will post notes and worksheets on our lecture's calendar.

Master website

The master website for Math 1553 contains much of the information found in this PDF and links to resources.

Course-level learning goals

By the end of this course, it is expected that students will be able to do the following.

A) Solve systems of linear questions.

B) Solve eigenvalue problems.

C) Analyze mathematical statements and expressions (for example, to assess whether a particular statement is accurate, or to describe solutions of systems in terms of existence and uniqueness).

D) Write logical progressions of precise mathematical statements to justify and communicate your reasoning.

E) Apply linear algebra concepts to model, solve, and analyze real-world situations.

The course also has a more specific list of section-level learning goals. Students are expected, at a minimum, to be able to do all problems from lecture and homework (and similar problems) on quizzes and exams. For more, see the portion of the master website that discusses how to succeed in this course.

Course information posted online, and Piazza

I will update the class web pages with class information and materials. You are responsible for obtaining any announcements or materials placed on my webpage and T-Square. We also have a Piazza forum for the class, to facilitate discussion. You can access it by clicking the Piazza tab at the left side of our T-Square site. It should ask you to register for our class. Please use your T-Square email address for your username.

Recitation

In addition to lecture (10:10 AM - 11:00 AM, MW, in College of Business 300), there are weekly recitations. The first recitation takes place during the first week of class.

Section E6: 10:10 AM - 11:00 AM, F, Skiles 168; Megha Tippur   mtippur3 AT gatech.edu
             Office hours: Tuesdays, 10:30-11:30 AM in Skiles 230
Section E7: 10:10 AM - 11:00 AM, F, Skiles 269; Jacob Chesler   cekaj AT gatech.edu
             Office hours: Tuesdays, 1:30-2:30 PM in Skiles 230
Section E8: 10:10 AM - 11:00 AM, F, Skiles 270; Lucas Wray   lwray3 AT gatech.edu
             Office hours: Tuesdays, 5:30-6:30 PM in Skiles 230
Section E9: 10:10 AM - 11:00 AM, F, Skiles 371; Derek Wu   dwu96 AT gatech.edu
             Office hours: Thursdays, 3:00-5:00 PM in Skiles 230

Homework

Homework will be done online through WeBWorK, accessed through T-Square. Assignments will be due weekly. The warmup assignment for the first week of class on WeBWork is just for practice and will not be graded.

Assignments will generally be due at **11:59 PM on Wednesdays**.

Your two lowest homework scores will be dropped. *No late homework will be accepted — no exceptions*. Each homework assignment counts the same amount toward your grade.

Quizzes, Exams, and regrades

Starting the week of August 28, we will have a 10-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 exams, which will take place during recitation on the following dates:

1. Friday, September 22
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 differently-colored 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.

Cumulative Final exam: Tuesday, December 12, from 6:00 PM - 8:50 PM.
For the full final exam schedule, see http://www.registrar.gatech.edu/students/exams.php.

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.

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/. Please also make an appointment with me to discuss your accommodation, if necessary.

The Honor Code and Academic Dishonesty

Do not cheat! Abide by the honor code at all times. See http://honor.gatech.edu and here.

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.

Missed work policy

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

- University-approved absence: Please give me notice by August 30, or as soon as possible once your absence has been approved.

- 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.

- In case of a family emergency, please have your academic advisor or the Dean's office contact me.

Otherwise, missed quizzes and missed exams result in a 0.

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 university-approved 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).

Grade breakdown

The components of the class are weighted 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 1

- 15% Midterm 2

- 15% Midterm 3

- 30% Final exam

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

Grade assignments

After *all* grades are in and all overall percentage scores for students have been computed using the weights described above, grades are assigned. The standard cutoffs are as follows.

A: [90%, 100%]   B: [80%, 90%)   C: [70%, 80%)   D: [60%, 70%)   F: [0%, 60%)

So, to guarantee an A, get 90% or better overall. (90 means 90, not 89.9)
To guarantee at least a B grade, get 80% or better overall, etc.

These cutoffs *might* be adjusted, but only in the downward direction (to make letter grades higher). In the event of a curve, only your final overall percentage grade for the course will be curved. Individual quizzes and exams will not be curved as we go along.

Extra credit, calculators, and entered grades on T-Square

1. There is **no extra credit**, except possibly in the form of a bonus question on an exam (if I decide to add one). There are also no quiz re-takes or exam re-takes.

2. You can use calculators to check your computations when doing homework. You are NOT allowed to use a calculator on quizzes or exams.

3. Once a quiz or exam has been graded, the grades will be entered on T-Square. When you receive the quiz or exam back, please check that the grade matches the grade recorded on T-Square. If it does not, you must contact your TA within two weeks of the assignment or quiz's date and present him or her with your graded assignment or quiz, so that they may correct the error.

Email policy

Check the syllabus first. Office hours and location, exam dates, policies, etc. are all available on the syllabus.

No grade discussion by email. Any questions about grades (including the curve) should be asked during office hours or in an appointment scheduled outside of office hours.

Math in person, rather than by email. Communicating math through email is often difficult and confusing. Instead, let's talk before or after class, during office hours, or at a scheduled appointment outside of office hours. Piazza is also available for discussing mathematics online.

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.

Waitlists, Registration, Permits, etc.

I am forbidden from doing anything regarding class registration. I cannot issue permits, remove students from waitlists, etc. For guidelines on such matters, please consult https://math.gatech.edu/permits-and-waitlists.

Attendance

Piazza polls conducted in lecture will be used for your participation grade, so bring a computer or smartphone to class with you. Responding to these questions counts toward your final grade, although it doesn't matter if your answer was correct. Your lowest three poll scores will be dropped.

You are expected to come prepared 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. Class disruptions of any kind will not be tolerated and may result in your removal from the classroom and loss of attendance/participation points for that day. Please show courtesy to your fellow classmates and instructor by adhering to the following class rules: unless otherwise directed, turning off all laptops, cellular phones, and all other electronic devices (unless being used for note-taking) during class, coming to class on time and staying for the entire class period, refraining from conversing with your fellow students, and putting away any reading materials unrelated to the course.

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.

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MyMathLab Course ID: jankowski93137

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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 tsquare, 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 online 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 looseleaf 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 TEXTBOOKS. THIS CODE CAN ONLY BE PURCHASED THROUGH THE CAMPUS BOOKSTORES OR DIRECTLY FROM PEARSON. CODES PURCHASED BY OTHER VENDORS WILL NOT WORK! Possible ISBNs for this text are: 1323131760, 1323132112, 132313204X, 1323132104, or 1323132120.