Math 1553

Sections G1-G5 / H1 – H5
Georgia Tech, Fall 2018
Dan Margalit

Download the Piazza app now if you can!
Soak Zone!

The first 10 rows of the lecture hall are in our Soak Zone. If you are sitting in the Soak Zone, prepare to get completely soaked by linear algebra knowledge.
Me
About Me

DOB 03/06/1976
Sex M
Eyes HAZ
Hgt 5’-10”
Wgt 150 lb
Donor ❤
More About Me
More About Me

Winning
Even More About Me
Textbook
The textbook is free and online.

Lay & MyMathLab are resources you can buy. I will not use them.
Recitation
Recitation

On Friday you have recitation with a TA in a group of about 30. Quizzes and Midterms happen in recitation.
Web sites
Web Sites

• Math 1553 Master Course Web Site
  • Run by course coordinator
  • Contains: common syllabus, how to get help, advice, etc.

• Math 1553 G/H Course Web Site
  • Run by me
  • Contains: info about office hours, TAs, recitation, calendar, slides, materials...

• Canvas
  • Contains: Grades
  • Links to WebWork (homework) & Piazza (discussion)
  • Front page has links to everything else mentioned above
Math 1553 G/H Course Web Site

Math 1553
Introduction to Linear Algebra
Fall 2018 — Sections G1 - G5 & H1 - H5

For most course information, see the Math 1553 Master Site:

Master Course Website

This is the master syllabus:

Syllabus

The textbook:

Interactive Linear Algebra

For WeBWorK, Piazza, Grades, etc. see Canvas:

Canvas

For online discussions and polls you can go directly to Piazza:

Piazza

For on-line access to the supplementary textbook see MyMathLab (course id: jankowski23945):

MyMathLab

Georgia Tech
Math 1553 G/H Course Web Site

Instructor

Professor    Dan Margalit
Lecture time  MW 11:15-12:05 (Sections G1-G5) and 12:20-1:10 (Sections H1-H5)
Lecture location Renewable Bioproducts Institute Paper Tricentennial Building 109
Office       Skiles 234
Email        margalit@math.gatech.edu
Office hours Monday 1-2, Wednesday 3-4, and by appointment

Teaching Assistants

Recitation time  F 11:15-12:05 (Sections G1-G5) and 12:20-1:10 (Sections H1-H5)
Recitations
G1: Skiles 271, Arjun Patel
G2: Skiles 371, Taisha Khawaja
G3: Clough 423, Athreya Gundammaj
G4: Skiles 368, Olivia Wogon
G5: Skiles 254, James Anderson
H1: Skiles 268, Jesse Jiang
H2: Skiles 270, Arjun Patel
H3: Skiles 271, Jacob Peloquin
H4: Skiles 308, Taisha Khawaja
H5: Skiles 368, Hamed Mousavi

TA Office Hours  Arjun Patel, tba
                Taisha Khajawa, tba
                Athreya Gundammaj, tba
                Olivia Wogon, tba
                James Anderson, tba
                Jesse Jiang, tba
                Jacob Peloquin, tba
                Hamed Mousavi, tba

Textbook

The textbook for the course is Interactive Linear Algebra, by Dan Margalit and Joe Rabinoff. Click on the icon below.
# Math 1553 G/H Course Web Site

## Course Calendar and Materials

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Materials</th>
<th>WebWork</th>
<th>Quiz/Exam</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>M Aug 20</td>
<td>Overview, Chapter 1</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>W Aug 22</td>
<td>2.1 Systems of linear equations</td>
<td></td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>F Aug 24</td>
<td>Recitation: Ch. 1 and 2.1</td>
<td>Warmup</td>
<td>-</td>
<td>Quiz: 2.1</td>
<td>-</td>
</tr>
<tr>
<td>M Aug 27</td>
<td>2.2 Row reduction</td>
<td></td>
<td>-</td>
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</tr>
<tr>
<td>W Aug 29</td>
<td>2.2 (continued) and 2.3 Parametric form</td>
<td>2.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>F Aug 31</td>
<td>Recitation: 2.2 and 2.3</td>
<td>Quiz: 2.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M Sep 3</td>
<td></td>
<td></td>
<td>Labor Day</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>W Sep 5</td>
<td>3.1 and 3.2: Vectors, vector equations, and spans</td>
<td>2.2 and 2.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>F Sep 7</td>
<td>Recitation: 3.1 and 3.2</td>
<td></td>
<td>Quiz: 2.2 and 2.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M Sep 10</td>
<td>3.3 Matrix equations</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>W Sep 12</td>
<td>3.4 Solution sets</td>
<td>3.1 and 3.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>F Sep 14</td>
<td>Recitation: 3.3 and 3.4</td>
<td></td>
<td>Quiz: 3.1 and 3.2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M Sep 17</td>
<td>3.5 Linear independence</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>W Sep 19</td>
<td>3.6 Subspaces</td>
<td>3.3 and 3.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>F Sep 21</td>
<td>Midterm 1: through 3.4</td>
<td></td>
<td>Midterm 1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Math 1553 Master Web Site

Math 1553
Introduction to Linear Algebra
Fall 2018

Welcome to Math 1553!

Use the tabs at the top of the page to navigate this site, which will serve as a master site containing many of the common policies for Math 1553 in Fall 2018.

EVERYTHING on this master site is subject to modification before the beginning of the Fall 2018 semester.

Note that your particular lecture’s policies and guidelines will be detailed in your instructor’s syllabus, so please read their syllabus very carefully.
Welcome to Math 1553 Section G!

In Canvas you will find your Grades, the Class roster, our Piazza page, and WeBWorK (under assignments).

Other important links:
- Master Course web site and Syllabus
- Class web site with Office hours and Course calendar / materials
- Math Lab and Tutoring
- Interactive Linear Algebra (our textbook)
- Slide deck and Reference sheet for the whole course
- MyMathLab (course id: jankowski23945)
Piazza

LaTeX Editor

I'd like to point out the LaTeX equation editor. When you are typing a message, click on the button that says fix.

You just type in regular LaTeX and it shows you a preview on the fly.

followup discussions for lingering questions and comments

Start a new followup discussion

Compose a new followup discussion
Under Assignments in Canvas. It will work on your second attempt.
Your first assignment
Mathematical Autobiography

The first assignment is to post a mathematical autobiography on Piazza.

The folder is **bio** and the subject is your name.

Include:

- A recognizable photo of you
- Any interesting/identifying things about you that you’d like to share
- Some important moments in your relationship with Math
Assessment

Grades!
# Grades

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polls</td>
<td>5%</td>
</tr>
<tr>
<td>Homework</td>
<td>5%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Midterms</td>
<td>45%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
</tbody>
</table>

90% is an A, etc. Target scores may be moved in your favor.

*If you score higher on the Final than your lowest Midterm then the Final is worth 37.5%...*
Exams

<table>
<thead>
<tr>
<th>Exam</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm 1</td>
<td>Sep 21</td>
</tr>
<tr>
<td>Midterm 2</td>
<td>Oct 19</td>
</tr>
<tr>
<td>Midterm 3</td>
<td>Nov 16</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Dec 11 @ 6pm</td>
</tr>
</tbody>
</table>

Notify me ASAP if you have a conflict.

No calculators, etc. on the exams.
Quizzes

- There are 7 quizzes, on Fridays.
- Lowest quiz grade dropped
- Typical timing:

<table>
<thead>
<tr>
<th>Week</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week $N$</td>
<td>Class</td>
<td></td>
<td>Class</td>
<td></td>
<td>Quiz on Week N-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HW due on</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Week N-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week $N+1$</td>
<td>Class</td>
<td></td>
<td>Class</td>
<td></td>
<td>Quiz on Week N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HW due on</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Week N</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Homework

• WeBWorK
• Generally due on Wed at 11:59 pm
• Normally as many tries as you want, but there are a handful of problems with a limited number of tries. The problem will say.
• One you get told your answer is correct, you are done with that problem.
Polls

• Piazza polls during class
• Lowest three dropped
• Graded only for participation
• To get credit you must sign in to Piazza with your GTid
• Answering a poll from any place other than the lecture hall is considered a breach of the academic honor code.
Other stuff
Laptop Free Zone

Laptops are not permitted in lecture, unless authorized by me.
Some Things that Make Me Happy

• Help setting up and taking down the whiteboard
• Advance notice if you need to come late / leave early
• Not using your phone in class
• Enthusiasm
• Email / online etiquette
• Saying hi if I see you out and about
• When you answer a question
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Difficulty of the Course

After the first exam, definitions will become fundamentally important!