MATH 1711A: Finite Math
16 May - 1 August 2016
Lecture MWF 9:20 - 10:30 in Skiles 202
Recitation TR 9:20 - 10:30 in Skiles 253
Course Webpage

Lecturer	Shane Scott
Email	scottsha@gatech.edu
Office	Skiles 252
Hours	MW11-12
	or by appointment
Recitation Instructor	Sudipta Kolay
Email	skolay3@math.gatech.edu
Office	Skiles 151
Hours	TBA

Welcome to Finite Math! To suceed in this course you will need to:

- Attend all lectures, and come prepared with your Learning Catalytics response device, and participate.
- Ask questions! If you haven't interupted lecture with a question, you're doing it wrong.
- Attend all recitations, and come prepared to discuss and solve problems.
- Discuss problems and concepts with classmates on Piazza and in study groups.
- Discurs problems and concepts with instructors in office hours.
- Discuss problems and concepts with tutors in the math lab.
- Complete homework.
- Prepare for quizzes and exams.

Textbook: Goldstein, Schneider, & Siegel, *Finite Mathematics & Its Applications*, 11th ed.

MyMathLab: (See last page) Online homework will utilize the MyMathLab portal. A MyMathLab subscription is required and comes with an electronic copy of the text. 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 textbook that is less expensive than purchasing the text and code separately. See the attached handout for registration information. **IMPORTANT: When signing up for MyMathLab your STUDENT ID must be your USERID for the GT system (i.e., your T-square USERID, as in gburdell3, etc).**

Participation: MyMathLab also comes with a Learning Catalytics we will use to take polls in classes. Points from participation will be added as extra credit to the homework score.

Resources:

- The Course Webpage will host the schedule and contain links to subject specific help materials.
- T-square will host grades and assignments.
- Piazza will host online class Q&A and announcements.
- MyMathLab will host online homework.
- Mathlab in Culc 280 offers free tutoring from recitation instructors. Check the link for summer hours.
- The Internet. Youtube and sites like Patrick Just Math have many helpful tutorials. Forums like Stack Exchange are great for asking questions when you are stuck and want help.

Course Objectives: This course will teach students to harness the power of probability to predict outcomes and devise strategies. We expect at the conclusion of Finite Mathematics that students can:

(a) compute probabilites by counting outcomes and recognizing distributions

(b) perform basic statistical analyses of distributions

(c) solve applied problems using linear algebra, programming, and game theory

Course Outline:

Module I: How to Count
Week 1, May 16: Sets, Principles of Counting, Inclusion-Exclusion
Week 2, May 23: Permutations, Combinations, Problems
Week 3, June 1: Binomial Theorem, Probability Basics
Exam June 9

Module II: Probability
Week 4, June 6: Computing Probabilities, Independence
Week 5, June 13: Bay's Theorem, Probability Distributions
Week 6, June 20: Binomial Trials, Means
Exam June 28

Module III: Applications and Computations
Week 7, June 27: Higher Moments, The Normal Distribution

Week 8, July 6: Matrices, Markov Processes
Exam July 14

Week 9, July 11: Game Theory
Week 10, July 19: Linear Programming
Final Exam–Comprehensive

Grade Policy: Weekly homework will be assigned in MyMathLab. No late submissions will be considered. Quizzes will be held during recitations. There will be threeo topic midterms and a cumulative final. Grades will be computed with the following weights

(a) Homework $\frac{1}{7}$
(b) Quizzes $\frac{1}{7}$
(c) Three Midterms $\frac{1}{7}$ each
(d) Final Exam $\frac{2}{7}$

Cutoff grades will be F=[0,60), D=[60,70), C=[70,80), B=[80,90), A=[90,100]. Make-up examinations will be given only in the event of a valid, documented excuse. Request regrades within one week of return.

Honor Code: All students are expected to comply with the Georgia Tech Honor Code. Any evidence of cheating or other violations of the Georgia Tech Honor Code will be submitted directly to the Office of Student Integrity. The institute honor code is available at http://www.honor.gatech.edu.

Important Dates:

First Class ..... 16 May
Add/Drop Deadline ..... 20 May
Memorial Day (No Class) ..... 30 May
Exam ..... 9 June
Exam ..... 28 June
Withdraw Deadline ..... 2 July
Independence Day Break (No Class) ..... 4-5 July
Exam ..... 14 July
Last Lecture ..... 22 July
Last Recitation ..... 21 July
Course Final Exam ..... Monday 1 August 8:00-10:50

Pearson's MyLab & Mastering
Student Registration Instructions

MyMathLab®

PEARSON ALWAYS LEARNING

To register for Math 1711 A: Finite Mathematics:

1. Go to www.pearsonmylabandmastering.com.
2. Under Register, select **Student**.
3. Confirm you have the information needed, then select **OK! Register now**.
4. Enter your instructor's course ID: scott40527, and **Continue**.
5. Enter your existing Pearson account **username** and **password** to **Sign In**.

   You have an account if you have used a Pearson product, for example: MyMathLab, MyITLab, MyPsychLab, MySpanishLab or Mastering, such as MasteringBiology.

   ➢ If you don't have an account, select **Create** and complete the required fields.
6. Select an access option.

   ➢ Use the access code that came with your textbook or that you purchased separately from the bookstore.
   ➢ Buy access using a credit card or PayPal account.
   ➢ If available, get 14 days temporary access. (The link is near the bottom of the screen.)
7. From the confirmation page, select **Go To My Courses**.
8. On the My Courses page, select the course tile **Math 1711 A: Finite Mathematics** to start your work.

To sign in later:

1. Go to www.pearsonmylabandmastering.com.
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password,** and **Sign In**.
4. Select the course tile **Math 1711 A: Finite Mathematics** to start your work.

To upgrade temporary access to full access:

1. Go to www.pearsonmylabandmastering.com.
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password,** and **Sign In**.
4. Select **Upgrade access** from the course tile **Math 1711 A: Finite Mathematics**.
5. Enter an access code or purchase access with a credit card or PayPal account.

For a registration overview, go to www.pearsonmylabandmastering.com/students/get-registered. Scroll down to **Need a little help?** and select a video.