Math 325K: Discrete Mathematics(53940), Fall 2018 Tuesday & Thursday 09:30 AM - 10:45 AM in RLM 5.114.

August 27th, 2018

Instructor: Bo Lin.

Prerequisites: Mathematics 408D, 408L, or 408S with a grade of at least C-.

Course Description: This course introduces mathematical proofs and covers various discrete (not calculus-based) topics in mathematics, including logic, number theory, sequences, set theory, functions and combinatorics. By the end of the semester, you should know how to read and critique a proof, and also how to write your own proof of an argument.

Website: `https://utexas.instructure.com/courses/1233423` (Canvas)

You need to log in with your UT EID. Course-related materials will be uploaded to here.

Textbook: *Discrete Mathematics: An Introduction to Mathematical Reasoning*, Brief Edition, by Susanna S. Epp. ISBN-13: 978-0-495-82617-0. (not the 4th edition!)

Grades:
Your final grade consists of the following parts: homework 20%, 1st midterm 20%, 2nd midterm 20%, final 40%. If you will miss one of the midterm exams because of an important event/emergency, you may make up the grade by the other midterm. For the exams, your grades may be curved up or down. Attendance is not included in your grades.

Exams:
There are two in-class midterm exams and one final exam.

- Midterm 1: Thursday, October 4th in class.
- Midterm 2: Tuesday, November 6th in class.
- Final: Thursday, December 13th, 9:00 AM - 12:00 PM in RLM 5.114.

The final exam will be cumulative.

Homework Assignments:

There are 12 homework assignments due at the end of the class on the following Tuesdays. Two of them will be dropped for your homework grade.

HW	Date	HW	Date
1st	Sep 11	2nd	Sep 18
3rd	Sep 25	4th	Oct 2
5th	Oct 9	6th	Oct 16
7th	Oct 23	8th	Oct 30
9th	Nov 6	10th	Nov 13
11th	Nov 20	12th	Dec 4

Homework Policies: Each homework assignment should be turned in by 10:45 AM on due date, either in paper or via email. Late homework is NOT accepted. You are encouraged to turn in homework in advance, in case you cannot attend a class.

Your homework assignments will be graded for correctness, while the grades only depend on completeness. Each assignment is worth 2 points, so after dropping 2 lowest scores, your total grade on homework assignments is 20 points.

Calendar: November 1st is the Last day an undergraduate student may, with the deans approval, withdraw from the University or drop a class except for urgent and substantiated, nonacademic reasons. For the complete calendar, see

`https://registrar.utexas.edu/calendars/18-19`

Tentative Lecture plan:

Date	Content	Date	Content
Aug 29	Chapter 1	Sep 4	Section 2.1
Sep 6	Section 2.2	Sep 11	Section 2.3
Sep 13	Section 3.1-3.2	Sep 18	Section 3.3-3.4
Sep 20	Section 4.1	Sep 25	Section 4.2
Sep 27	Section 4.3-4.4	Oct 2	Section 4.5-4.6
Oct 4	Midterm 1	Oct 9	Section 5.1
Oct 11	Section 5.2	Oct 16	Section 5.3
Oct 18	Section 5.4-5.5	Oct 23	Section 6.1
Oct 25	Section 6.2	Oct 30	Section 7.1
Nov 1	Section 7.2	Nov 6	Midterm 2
Nov 8	Section 7.3	Nov 13	Section 7.4
Nov 15	Section 8.1-8.2	Nov 20	Section 8.3
Nov 27	Section 9.1	Nov 29	Section 9.2-9.3
Dec 4	Section 9.4-9.5	Dec 6	Review session

Services for students with disabilities: If you have a documented disability, you should contact Services for Students with Disabilities (SSD) at (512)471-6259 (voice) or (512)410-6644 (video phone), or visit `http://diversity.utexas.edu/disability/`. You must contact me by September 27th to ensure that accommodations can be made.

Counseling and Mental Health: The university provides resources for counseling and mental health, whether class-related or not. Visit Counseling and Mental Health Center at

- Address: Student Services Bldg (SSB), 5th Floor.
- Hours: Monday through Friday, 8 AM 5 PM.
- Phone: (512)471-3515, by appointments.
- Crisis line: (512)471-CALL (2255)
- Website: `https://cmhc.utexas.edu/`.

Academic integrity: Cheating is punished to the fullest extent allowed by university policy. Cheating includes, but is not limited to, using any electronic device on an exam, and presenting another persons work as your own.