Course Profile for Discrete Mathematics (ve203)

September 11, 2017

1 Course Information

Lecturer: Zach McKenzie
E-mail: zachiri.mckenzie@sjtu.edu.cn
Room: 409
Lectures: Mondays of every odd week, Tuesdays and Thursdays 4:00pm-5:40pm in room E3-201.
Office Hours: Mondays 10am-12noon
Teaching Assistants: See CANVAS for their contact details
Recitation Classes: Teaching Assistants will lead a weekly recitation class beginning in the second week.

2 Grading Policy

Assignments worth 25%: Assignments will be given in the form of problem sets, and may require extra reading and the use of mathematical software.

Each assignment is due at the beginning of class on the day indicated. Please plan your time well. A penalty of 10% per day late will apply to assignments that are not handed in at the beginning of class on the due date.

Exams worth 75%: There will be two midterm exams worth 25% each and a final exam worth 25%.

3 Textbook and Syllabus

Textbook: "Discrete Mathematics and Its Applications", by Kenneth H. Rosen, 6th Edition.

Week	Topic	Textbook Sections
1	Logic	1.1-1.5
2	Sets, numbers and mathematical induction	2.1-2.4, 8.5, 4.1-4.3
3	Mathematical induction and the reals	4.1-4.3, A-1
4	**National Day**	
5	Functions, sequences and algorithms	3.1-3.3, 4.4-4.5
	1st midterm exam (week 6)	
6, 7	Introduction to number theory	3.4-3.8
8, 9	Counting and probability	5.1-5.5, 6.1-6.4, 7.1-7.6
	2nd midterm exam (week 10)	
10, 11	Relations	8.1-8.4, 8.6, 9.1-9.8
12	Graphs	10.1-10.5
13	Trees	11.1-11.4
14	**Final exam**	

Please note that this is just a rough guide that is likely to change over the course of the term.

4 LaTeX

As engineers, you are strongly encouraged to familiarize yourselves with a mathematical typesetting program called LaTeX. This is open-source software, and there are various implementations available. I suggest that you use Baidu or Google to find a suitable implementation for your computer and OS.

While the use of LaTeXis *optional*, there will be a 10% bonus to the awarded marks for those assignments handed in as typed LaTeXmanuscripts.

5 Honour Code

- Academic honesty and trust are important. Students are responsible for familiarising themselves with what is considered as a violation of honour code.
- Assignments are to be solved by each student individually. You are encouraged to discuss assignment problems with other students, but you are advised not to show your written work to others. Copying someone else's work is a very serious violation of the honour code.
- You may read resources on the Internet, such as relevant articles on Wikipedia, Wolfram MathWorld or any other forums, but you are not allowed to post your assignment questions online and ask for answers. It is regarded as a violation of the honour code.
- Since it is impossible to list all conceivable instance of honour code violations, the students has the responsibility to always act in a professional manner and to seek clarification from appropriate sources if their or another students conduct is suspected to be in conflict with the intended spirit of the honour code.