

M118

Finite Mathematics

Instructor: Iztok Hozo,
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Time and Location: MW 4:00 – 5:15, Hawthorn 400

Office hours: MW: 8:50 – 9:50
MW: 1:00 – 2:30 (by appointment)
MW: 5:15 – 5:45 (by appointment)

Textbook:
Finite Mathematics, 10th Ed., by Barnett/ Ziegler/ Byleen.

Grading: Pup-up quizzes: (40%),
A midterm exam: (30%) and
A final exam: (30%).

Important Dates:

The **final exam** is on Wednesday, May 2 in our regular classroom (H400) from 4:00 p.m. to 6:00 p.m. **This time is unchangeable.** (Please adjust your schedule)

Description: The course will be centered on several main topics covering linear programming, simplex method, and probability theory with applications.

Homework will be assigned, but not collected. Pop-up quizzes will consist of the questions previously assigned as homework. The quizzes will count for 40% of the final course grade, thus it is extremely important to follow and understand the material as it is being taught. You are encouraged to ask questions, and to participate in class activities as much as possible to make the learning process customized to your taste. It is up to you to make sure that I repeat and explain everything in detail --- **by asking questions in class**. It is not the answer that is important but how you get there and the understanding and justification of each step. Practice writing complete solutions for your homework, as this is what is expected on quizzes. A ton of homework will problems be assigned, but additionally working out **all** odd-numbered questions of each covered section is strongly recommended.

Read each section carefully - **work** as many exercises as you can (even those without the answers in the back). You are encouraged to work with other students. You may find that the actual amount of homework you do is more or less than other students. On average, you should expect to spend at least **NINE – TWELVE HOURS per week** outside the class working on this material.

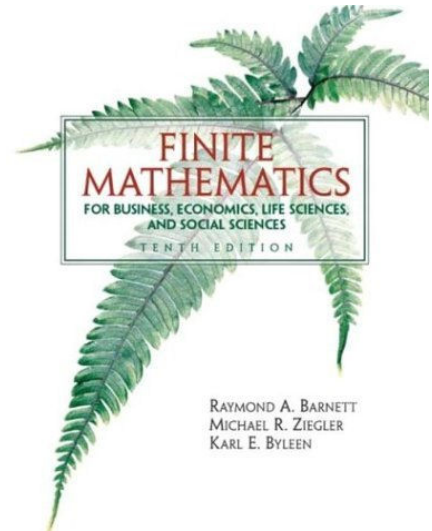
Goal:

Upon finishing this course, you will be able to solve problems such as:

Cost Control An appliance repair shop has 5 vacuum cleaners, 12 TV sets, and 18 VCRs to be repaired. The store employs two part-time repairmen. One repairman can repair one vacuum cleaner, two TV sets and six VCRs in 1 week, while the second repairmen can repair one vacuum cleaner, two TV sets and six VCRs in one week. The first employee is paid \$250 a week and the second employee is paid \$220 a week. To minimize the cost, how many weeks should each of the two repairmen be employed?

Family What is the probability that a family with exactly 6 children will have 3 boys and 3 girls?

Roulette If a gambler plays the number 15 for 200 consecutive times on a roulette, how much is s/he expected to win/lose?



This is a **tentative** schedule that may vary during the semester. Please attend the classes if you want to know about any changes to this schedule! (I will try to keep updated syllabus on the web: www.iun.edu/~mathiho).

<u>TENTATIVE SYLLABUS</u>			
Week	Date	Day	Homework assignment and Quizzes
1	Jan 8	Monday	6.2: 1-19 all odd, 25, 29, 31, 33, 35, 37, 39, 59, 61, 63, 65, 67, 69
	Jan 10	Wednesday	Pretest and Review
2	Jan 15	Monday	Martin Luther King Day – no classes
	Jan 17	Wednesday	6.3: 1-15 all odd, 19, 21, 23, 35, 37, 41, 45, 49, 51, 53, 59, 61 6.4: 1-19 all odd, 25, 27, 29, 37, 39, 41, 45, 49, 57, 59, 61, 63
3	Jan 22	Monday	Review
	Jan 24	Wednesday	7.1: 5-27 all odd, 31-51 all odd, 55-69 all odd, 77, 81
4	Jan 29	Monday	7.2: 1 - 27 all odd, 31 – 37 all odd, 39a, 41 -49 all odd, 61 - 73 all odd
	Jan 31	Wednesday	7.3: 1, 3, 5, 7, 9, 13, 15, 17, 19, 27, 29, 33, 35, 39, 41, 49, 51, 55
5	Feb 5	Monday	Review
	Feb 7	Wednesday	Review
6	Feb 12	Monday	7.4: 1, 3, 5, 11, 13, 15, 23, 25, 27, 29, 31, 37, 43, 45, 47, 49, 51
	Feb 14	Wednesday	Snow Day
7	Feb 19	Monday	7.5: No Homework, 8.4: 1-39 all odd, 45, 49, 51, 55, 59
	Feb 21	Wednesday	Review
8	Feb 26	Monday	Review
	Feb 28	Wednesday	MIDTERM
9	Mar 5	Monday	4.1: 5, 9, 11, 13, 15, 17, 27, 29, 51, 53, 55, 57, 59, 60, 63
	Mar 7	Wednesday	4.2: 11, 41, 45, 47, 51, 53, 61
10	Mar 12	Monday	Spring Break – no classes
	Mar 16	Wednesday	
11	Mar 19	Monday	4.3: 11, 14, 17, 19, 31, 35, 39, 47, 49, 63, 65, 67, 73, 79
	Mar 21	Wednesday	Review
	Mar 23	Friday	Automatic ‘W’ Deadline
12	Mar 26	Monday	4.4: 3, 5, 11, 19, 27, 31, 33, 37, 43, 51, 53, 55, 57, 58, 61, 63, 69, 71ab
	Mar 28	Wednesday	4.6: 1-21 all odd
13	Apr 2	Monday	Review
	Apr 4	Wednesday	5.1: 3, 9, 15, 17, 21, 27, 33, 37, 41, 53, 57, 59
14	Apr 9	Monday	5.2: 9, 19, 31, 35, 37, 41, 43
	Apr 11	Wednesday	5.3: 1-12 all; Page 360: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 33, 41, 44; Page 369: 17, 19
15	Apr 16	Monday	5.4: No Homework, Review
	Apr 18	Wednesday	10.1: 1-27 all odd, 41, 49, 51, 53, 57, 59
16	Apr 23	Monday	10.2: 1-29 all odd, 41, 43, 49, 51
	Apr 25	Wednesday	Review
Finals Week	May 2	Wednesday	FINAL EXAM