

Mathematics 104: Finite Mathematics

Online Course

Spring Semester 2012

Instructor:

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Department of Mathematics

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General Information:

Title:	Mathematics 104: Finite Mathematics
Credits:	3 credits
Prerequisite:	Mathematics 102 or equivalent or appropriate placement test score
Text:	Barnett, Ziegler, and Byleen, Finite Mathematics for Business, Economics, Life Sciences, and Social Sciences, 1999, Prentice-Hall, Inc., twelfth edition
Materials:	Graphing Calculator (the TI-84 or 84+ is recommended) Three large size examination booklets (available at the Varsity Mart)

Course Description:

Functions, graphs of functions, graphical solutions to equations and inequalities, linear and quadratic models; systems of linear equations, matrices, linear programming; mathematics of finance; sets and counting, probability

Goals:

To give the students an understanding of and appreciation for some of the uses of mathematics in realistic applied settings. Math 104 develops quantitative skills that will be useful for a variety of applications, such as finance and probability. It develops student capabilities related to several of NDSU's General Education Objectives, including:

- The ability to communicate effectively in a variety of contexts and formats
- The ability to locate and use information for making appropriate personal and professional decisions
- The ability to comprehend concepts and methods of inquiry in science and technology, and their applications for society.

Evaluation:

Grades in the course will reflect students' demonstrated attainment of course objectives. Specifically:

- 50% of your grade will be based on performance on two exams.
- 30% of your grade will be based on quizzes and homework.
- 20% of your grade will be based on the final examination.

The standard 90-80-70-60 grading scale will be used. You should not expect any "curving" of grades.

Notes:

- Homework and online quizzes will be posted on Course Compass. There will be either an announcement or an email letting you know when homework and/or quizzes are due.
- Exams will be given on the dates/times shown in the schedule below. Rooms will be announced. Approved make-up exams must be completed within one week of the scheduled exam date
- **Special Needs:** "Any students with disabilities or other special needs, who need special accommodations in the course, are invited to share these concerns or requests with the instructors soon as possible."
- **Academic Honesty:** All work in this course must be completed in a manner consistent with NDSU University Senate Policy, Section 335 Code of Academic Responsibility and Conduct.
- The Mathematics Department has resource rooms available for any student seeking additional help, free of charge. Hours for these rooms are posted in Minard 412.

Tentative Schedule

Week	Date	Topics
1	Jan. 9 – 13	Get registered to Course Compass
2	Jan. 16 – 20	1.2, 2.1
3	Jan. 23 – 27	2.3
4	Jan. 30 – Feb. 3	3.1, 3.2
5	Feb. 6 – 10	3.3, 3.4
6	Feb. 13 – 17	4.1, 4.2
7	Feb. 20 – 24	Exam #1
8	Feb. 27 – Mar. 2	4.3, 4.4
9	Mar. 5 – 9	5.1, 5.2
10	Mar. 12 – 16	Spring Break
11	Mar. 19 – 23	5.3, 7.2
12	Mar. 26 – 30	7.3
13	Apr. 2 – 6	Exam #2
14	Apr. 9 – 13	7.4
15	Apr. 16 – 20	8.1
16	Apr. 23 – 27	8.2, 8.3
17	Apr. 30 – May 4	Catch up
18	May 7 Final Exam	Final Exam 3:15-5:15 pm Room to be announced

Practice Problem List

1.2: 1-33 odd, 41-57 odd, 61, 63, 65, 67, 69

2.1: 47-53 odd, 87-91 odd

2.3: 23-31 odd, 39, 41, 47, 61, 63, 65

3.1: 1-31 odd, 41-51 odd

3.2: 1-27 odd, 33, 35, 39, 43, 49, 53, 55, 57, 67, 69

3.3: 1-15 odd, 21-45 odd

3.4: 1-15 odd, 21-25 odd, 31-47 odd

4.1: 1-4, 5-33 odd, 41-53 odd, 61, 67

4.2: 1-23 odd, 33-73 odd, 59, 61

4.3: 1-19 odd, 31-53 odd, 57, 61, 67, 77

4.4: 1-39 odd, 65, 67, 69

5.1: 1-19 odd

5.2: 1-29 odd, 35, 39

5.3: 1-23 odd, 31, 33, 37, 41

7.2: 1-39 odd, 67-79 odd

7.3: 1-61 odd

7.4: 37-41 odd, 53, 55, 61-65 odd

8.1: 1-83 odd, 89, 91

8.2: 1-33 odd, 41-49 odd, 53-57 odd, 75

8.3: 1-11 odd, 29, 31, 61