Mathematics 104: Finite Mathematics

Spring Semester 2012

Instructor:

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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:	Finite Mathematics, Kendall/Hunt Publishing Co., compiled by Lonnie Hass and Larry Taylor, 4th edition
Materials:	Graphing Calculator (TI-84, TI-84+) 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 satisfies Category 2 of NDSU's General Education requirements. 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.

Students will demonstrate their abilities by completing various group projects, each containing a writing component.

Evaluation:

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

- 50% of your grade will be based on performance on three exams **given outside of class, in the evening.**
- 30% of your grade will be based on in-class work, and quizzes
- 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.

(over)

Notes:

- Expect at least one quiz each week that there is not an exam scheduled. **No make-up quizzes will be given**. Your lowest quiz score will be dropped.
- 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	1.1, 1.2
2	Jan. 16-20	1.3
3	Jan. 23-27	2.1, 2.2
4	Jan. 31-Feb. 3	2.3, 2.4
5	Feb. 6-10	3.1 **Exam #1 Feb. 9 (6:30 p.m.)**
6	Feb. 13-17	3.2, 3.3
7	Feb. 20-24	3.3, 3.4
8	Feb. 27- Mar.2	4.1, 4.2, 4.3, 4.4
9	Mar. 5-9	**Exam #2 Mar. 8 (6:30 p.m.)**
10	Mar. 12-16	**SPRING BREAK**
11	Mar. 19-23	4.5, 4.6
12	Mar. 26-30	5.1, 5.5
13	Apr. 2-6	5.6, 5.2
14	Apr. 9-13	5.3, 5.4
15	Apr. 16-20	5.7 **Exam #3 Apr. 19 (6:30 p.m.)**
16	Apr. 23-27	6.1, 6.2
17	Apr. 30-May 4	6.3
18	May 8	**Final Exam 3:15-5:15 pm** Room to be announced

Practice Problem List

1.1: 1-15
1.2: 1-25
1.3: 4-6, 10-16

2.1: 1-21 odd
2.2: 1-15
2.3: 1-10
2.4: 1-19 odd

3.1: 1-18, 19, 23
3.2: 1-11
3.3: 1-13 odd
3.4: 1-11 odd, 14-17

4.1: 21-67 odd
4.4: 1-12
4.5: 1-3, 6, 8, 13, 14, 16
4.6: 1-5

5.1: 1-17 odd
5.2: 1-19 odd
5.3: 1-23 odd
5.4: 1-23 odd
5.5: 1-21 odd
5.6: 1-21 odd
5.7: 1-27 odd

6.1: 1-16, 19
6.2: 1-21 odd
6.3: 1-25 odd