

MA 110-105 **Finite Mathematics** Spring 2009

Instructor: Yorck Sommerhäuser

Office: ILB 423

Telephone: 414-8039

E-Mail: sommerh@jaguar1.usouthal.edu

Office hours: Tuesday 3:30 pm–5:00 pm, Thursday 3:30 pm–5:00 pm

Prerequisites: Two years of high school algebra, a year of high school geometry, a placement test score of at least 35

Textbook: D. B. Johnson/T. A. Mowry, *Mathematics—A practical odyssey*, Brooks/Cole, Belmont, 2008

Course description: This course is intended to give an overview of topics in finite mathematics together with their applications. The course includes logic, sets, counting, permutations, combinations, basic probability, descriptive statistics, and their applications.

Objectives: The goal of the course is to introduce the student to the basics of finite mathematics, in particular logic and probability, both theoretically and practically. Practically, the student will acquire the ability to set up truth tables and to compute probabilities. Theoretically, the student will learn how to distinguish valid from invalid arguments and to judge statements about probabilities critically.

Coverage: We cover the sections 1.1-1.3, 2.1-2.4, 3.1-3.6, 4.1-4.4 of the textbook. Time permitting, additional material may be included.

Attendance: Attendance is required and contributes to the final grade. Three classes may be missed without affecting this grade. Absence in more than half of the classes results in failing the whole course.

Exams: There will be two midterm exams and a comprehensive final exam. No make-up exams will be offered. Calculators and other electronic devices must not be used during the exam unless explicitly stated otherwise. The midterm exams take place on Tuesday, February 17 as well as Thursday, March 26. The final exam takes place on Thursday, May 7, 1:00 pm–3:00 pm.

Homework: The daily homework assignment will consist of a reading assignment and a problem assignment. About half of the daily problem assignment has to be completed online via WebAssign. The time frame for this completion begins after the lecture in which the problem was assigned, and ends before the next lecture.

Quizzes: There will be a short quiz every week on Thursday. No make-up quizzes will be offered. However, the two lowest quiz grades will be dropped.

Grading weights:

| | |
|------------------|----------|
| Attendance: | 5% |
| Online homework: | 15% |
| Quizzes: | 15% |
| Midterm exams: | 20% each |
| Final exam: | 25% |

Grading scale:

| | |
|----|------|
| A: | 90% |
| B: | 80% |
| C: | 70 % |
| D: | 60% |

Policies: Eating, drinking, and smoking is not permitted in the classroom. The use of electronic devices such as laptops, i-pods, cellphones, or calculators is not allowed unless explicitly stated by the professor. Cellphones may be brought to class, but must be completely off and stowed away. They must not be used during class at any time.

Tutoring: The tutoring laboratory in ILB 456 provides additional help for this course.

Disabled students: If you have a specific disability that qualifies you for academic accommodations, please notify me and provide certification from the Office for Special Student Services, which is located in Room 270 of the Student Center (Tel. 460-7212).