

Math 100.2 – Applications in Mathematics

Spring 2012

Instructor – Dr. Fraboni

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Office hours: Tue 9:30-11, Wed 1-2:30 or by appointment

Course Materials – The text for this course is the custom printed book from McGraw-Hill containing chapter 9 from *Discrete Mathematics and Its Applications*, Sixth Edition by Rosen and chapter 13 from *Mathematics in Our World* by Bluman.

Course Goals – After successfully completing this course students will:

- understand how mathematical models can help us answer questions, draw conclusions, and make decisions.
- understand a variety of applications of mathematics using concepts of graph theory.
- be able to convert real-world situations into graphs that can be analyzed quantitatively.
- understand the complexities of voting systems.

Homework and Quizzes – Each day there will be reading and homework assigned. Some assignments will be turned in and graded, some will be discussed in class, but not graded. The problems assigned to hand in will be collected at the beginning of the class meeting. In addition, we will have a quiz at the beginning of most classes.

It is vital that you do all the homework problems assigned; you should keep all your work in a binder or notebook for reference. For every hour in class you should expect to spend at least 2 hours doing work outside of class. You cannot learn mathematics without lots of practice!

Exams – There will be two exams. The midterm will be on March 1 and the final on May 3 at 8:30am.

Attendance – Mandatory. Regular attendance is vital. A late assignment will be graded with a reduction of 10% for each day it is late. There will be no make-up quizzes given, and make-up exams are given only in extreme, pre-approved cases. If you must miss an exam it is

your responsibility to contact me in advance. Students who are unable to attend class are responsible for all assignments and material covered in that class.

Grading – Grades will be the result of quizzes, homework, and two tests. The breakdown is as follows:

Quizzes – 25% total

Projects – 25% total

Midterm Exam – 20%

Final Exam – 30%

Disclaimers – This syllabus is subject to change through the semester. Any updates to the syllabus will be announced in class. The instructor reserves the right to apply qualitative judgment in determining final grades for the course.

Learning Disability Accommodations – Students who wish to request accommodations in this class for a disability should contact Mr. Joe Kempfer, Assistant Director of Learning Services for Disability Support, 1307 Main Street (extension 1510). Accommodations cannot be provided until authorization is received from the office of Learning Services.

Mathematics Department Academic Honesty Policy – The Mathematics Department supports and is governed by the Academic Honesty Policy of Moravian College as stated in the Moravian College Student Handbook. The following statements will help clarify the policies of members of the Mathematics Department faculty.

In all at-home assignments which are to be graded, you may use your class notes and any books or library sources. When you use the ideas or thoughts of others, however, you must acknowledge the source. You also may not use a solution manual or the help (orally or in written form) of any individual other than your instructor. If you receive help from anyone other than your instructor or if you fail to reference your sources, you will be violating the Academic Honesty Policy of Moravian College. You may work with your fellow students on homework which is not to be graded. You are responsible for understanding and being able to explain the solution of all assigned problems, both graded and un-graded.

All in-class or take-home tests and quizzes are to be completed by you alone without the aid of books, study sheets, or formula sheets unless specifically allowed by your instructor for a particular test.