## Welcome to Discrete Mathematics (CS 224, Spring 2006)

## **Textbook:**

Kenneth. H. Rosen, <u>Discrete mathematics and its applications</u>, McGraw-Hill, 5th ed.

Text Website: www.mhhe.com/rosen

**Instructor:** 

Dr. Jianmin Ma Office: Seney 115

Email: jma3@learnlink.emory.edu Hours: M Th 3-4PM or by appointment

**Corequisite:** Math 112

**Course Content:** Covers the fundamentals of discrete mathematics, including: logic, sets, functions, growth of functions, algorithms, mathematical reasoning, proofs, induction, relations, graphs, trees and combinatorics. There is an emphasis on how discrete mathematics applies to computer science in general, and algorithm analysis in particular.

Why Study Discrete Mathematics? As pointed out by Dr. K.H. Rosen, the author of our text: "Discrete mathematics is the gateway to more advanced courses in all parts of the mathematical sciences. Discrete mathematics provides the mathematical foundations fro many computer science courses, including data structures, algorithms, database theory, automata theory, formal languages, compiler theory, computer security, and operating systems."

**Class Attendance** is mandatory. If you must miss class due to illness or other valid excuse (e.g. athletic event) please send me email with explanation. An inordinate number of absences will be handled in accordance with the College's policy.

**Homework Assignments:** Assignments, unless otherwise specified by the instructor, are to be completed individually. While students are encouraged to consult each other for ideas for assignments, the solutions should be completed individually. Any help one student gives another should be instructional help only. If the instructor feels that a student has not completed an assignment individually, the instructor may question the student on that assignment. The student should be able to explain how he/she worked the problem and should be able to work similar problems.

Late assignments will not be accepted without permission. If permission is given, the following penalties will be assigned:

1 day late: 10% reduction
2 days late: 20% reduction
3 days late: 30% reduction
Not accepted after 3 days late.

**Exams** cannot be made up without prior arrangement with the instructor with the exception of Emergency. The exams are on the Fridays of the following dates: **February 24, March 31**, and **April 28**.

## **Evaluation:**

- Assignments: 50 %, Exams: 33%, Final: 17%
- 92 100% A |90 91% A-|88 89% B+|82 87% B|80 81% B-|78 79% C+|70 77% C|58 69 % D|57 % and below: F

## **Honor Code**

THE HONOR CODE OF OXFORD COLLEGE APPLIES TO ALL WORK SUBMITTED FOR CREDIT IN THIS COURSE. BY YOU SIGNATURE ON SUCH WORK YOU PLEDGE THAT WORK WAS DONE IN ACCORDANCE WITH RULES STIPULATED ON THE WORK OR IN THIS SYLLABUS.