Introduction to Discrete Structures
CIS 11, Section C
Fall 2002

Textbook: Kenneth H. Rosen (1998): *Discrete Mathematics and its Applications*, McGraw Hill, ISBN 0-07-289905-0 and *Students Solutions Guide*, McGraw Hill, ISBN 0-07-2336102.
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Office Hours: Wednesday 10:50 - 11:50 AM
Classes: Monday/Wednesday/Friday, 10:00 - 10:50 am, 234 New Ingersoll Hall
Note: There will be no classes on September 6th, September 16th, October 14th and November 29th. However, classes will follow a Monday schedule on September 17th and October 16th.
Requirements: 2 in-class problem solving examinations and one final examination. Each examination will cover *all* the material previously covered. The best (and the only) way to prepare for the exams is to work through the solved examples and problems at the end of each section in the textbook. The *Student Solutions Guide* carries solutions to all the odd-numbered problems.
Examination Dates:
Examination #1 (25 % of final grade): October 4th
Examination #2 (25 % of final grade): November 8th
The Final Exam (50 % of final grade) will be held at its scheduled time during Finals week.

There will be NO MAKE-UP examinations.

Lectures and Topics:

The following is the sequence of lectures (topics with section numbers). We might deviate at times if some material takes a little longer to cover than expected.
1: Logic: Propositions, Propositional Operators, Equivalences 1.1, 1.2
2: Boolean Algebra: Boolean Functions and their Representation 9.1, 9.2
3: Logic: Predicates and Quantifiers1.3
4: Set Theory 1.4, 1.5

5: Functions 1.6
6: Probability Theory 4.4, 4.5
7: Methods of Proof and Induction 3.1, 3.2
8: Induction and Recursion 3.2, 1.7
9: Induction and Recursion 3.2, 3.3
10: Examination #1
11: Algorithms 2.1, 2.2
12: Growth of Functions 1.8
13: Recursive Algorithms 3.4
14: Recursive Algorithms 3.4
15: Recurrence Relations 5.1, 5.2
16: Recurrence Relations 5.2, 5.3
17: Relations 6.1, 6.2
18: Relations 6.4, 6.5, 6.6
19: Relations and Graphs 6.3, 7.1
20: Examination #2
21: Graphs 7.1, 7.2, 7.3
22: Graphs 7.4, 7.5
23: Trees 8.1, 8.2
24: Trees 8.1, 8.2, 8.3
25: Modeling Computation 10.1, 10.2
26: Modeling Computation 10.2, 10.3
27: Modeling Computation 10.3, 10.4