

# Tentative Schedule

Math 245, Discrete Structures

Spring 2010

Schedule may change depending on how much time we need to spend on a particular topic.

<b>Date</b>	<b>Topic/assignment</b>
Wednesday, February 10	Introduction to the course
Friday, February 12	What is logic, why study it, some examples; 1.1. Statement Forms and Logical Equivalences
Monday, February 15	No class.
Wednesday, February 17	Brief history of sets 1.2. Set Notation 1.4. Set Operations and Identities
Friday, February 19	1.3. Quantifiers, Tarski's World
Monday, February 22	1.5. Valid Arguments
Wednesday, February 24	Chapter 1 practice, Quiz, begin Chapter 2
Friday, February 26	2.1. Direct Demonstration
Monday, March 1	2.2, 2.3 General Demonstration
Wednesday, March 3	2.4 Indirect Arguments 2.5 Splitting into Cases
Friday, March 5	CLASS CANCELED. PRACTICE PROOF WRITING. (Worksheet will be assigned)
Monday, March 8	Practice proof writing
Wednesday, March 10	Test 1 review
Friday, March 12	Test 1
Monday, March 15	Project 1 assigned 4.1 Sequences, Indexing, and Recursion
Wednesday, March 17	Practice with recursion
Friday, March 19	4.3 Mathematical Induction, an Introduction Review Sigma notation
Monday, March 22	4.4. Induction and Summations Induction practice Big induction homework assigned
Wednesday, March 24	Induction practice
Friday, March 26	Induction practice
Monday, March 29- Friday, April 2	Spring break

Monday, April 5	5.1 General Relations 5.2 Special Relations on Sets
Wednesday, April 7	5.2 Equivalence relations
Friday, April 9	Project presentations
Monday, April 12	Finish project presentations; 5.3 and 5.4: functions (briefly); Introduction to counting
Wednesday, April 14	6.1-6.3. Multiplication principle, Permutations and Combinations, Addition and subtraction
Friday, April 16	6.1-6.3. Multiplication principle, Permutations and Combinations, Addition and subtraction
Monday, April 19	6.4. Probability
Wednesday, April 21	Test 2 review
Friday, April 23	Test 2
Monday, April 26	Introduction to graphs Project 2 assigned
Wednesday, April 28	9.2. Euler Circuits
Friday, April 30	9.3. Hamiltonian Cycles
Monday, May 3	9.5. Chromatic Number
Wednesday, May 5	Project 2 presentations; Final project assigned
Friday, May 7	10.1. Trees 10.2. Search Trees 10.3. Weighted Trees,
Monday, May 10	Trees, continued
Wednesday, May 12	Test 3 review
Friday, May 14	Test 3
Monday, May 17	10.4. Analysis of Algorithms (Part 1)
Wednesday, May 19	10.5. Analysis of Algorithms (Part 2)
Friday, May 21	Final project presentations