

MATH 321 COURSE SCHEDULE Spring 2006 (Please note that adjustments may be made during the semester.)

**THE HOMEWORK ALWAYS INCLUDES READING THE SECTIONS OF THE TEXT WHICH WERE COVERED IN CLASS THAT WEEK.** It wouldn't hurt to read ahead a little bit, also.

Date	Chapter	Topics	Practice Exercises
2 Feb	1.6	sets: notation, membership, subsets, cardinality, power sets, Cartesian product	1,3,5,9,11,13,15,19,21
	1.7	set operations: union, intersection, subtraction, membership tables, bit strings	1,3,7,11,15,17,19,21,41,45c,45d
9 Feb	1.1	logic: propositions, truth value, negation, notation, converse, contrapositive, inverse, truth tables, bit strings	1,3,5,7,21,23,27,33
	1.2	propositional equivalences: truth tables, tautologies	1,3,5,7,13,15,17
16 Feb	10.1	Boolean functions: notation, values, proof of identities/equalities	1,3,7,11,23,25,31,37
	10.2	representing Boolean functions: sum-of products expansion	1,3,5,7
23 Feb	<i>Hwk 1</i>	<i>is due tonight.</i>	
	10.3	logic gates: notation, design, use of half- and full-adders	1,3,5,7,9
	10.4	minimization of circuits: K-maps	1,3,5,7,13,21
2 Mar	<i>Hwk 10a</i>	<i>is due tonight.</i>	
	<b>Test 1</b>	<b>chapters 1 &amp; 10.1-.2</b>	
	2.1	algorithms	1,3,11,13,15,17,19,21
	2.3	complexity of algorithms	1,3,7,9,11,13
	2.4	integers and division: division, primes, division algorithm, gcd, mod, cryptology	1,5,7,9,11,13,19,29a-e,37,39,53
9 Mar	2.5	integers and algorithms: binary, hexadecimal, mod exponentiation, Euclidean algorithm	1,3,5,11,19,21,23,25 (#20 will be on next week's worksheet)
	2.6	number theory: RSA encryption	46 and worksheet on encryption
16 Mar	<i>Hwk 10b</i>	<i>is due tonight.</i>	
	3.1	proof strategy	1,3,5,7
	3.2	sequences and summations	1,3a, 3b, 5a, 5b, 5d, 5e,7,13,17
30 Mar	<i>Hwk 2</i>	<i>is due tonight.</i>	
	<b>Test 2</b>	<b>chapters 10.3-.4 &amp; 2.1-.6</b>	
	3.4	recursive definitions	1,3,7,9,13,23 & function worksheet
	3.5	recursive algorithms	1,3,5,7,21
6 Apr	8.1	introduction to graphs	1,3,5,7,13,17,19
	8.2	graph terminology (skip "isolated", "pendant" & "Q" stuff in homework exercises)	1,3,5,13,25a-c,27,29,33,39 for #33 keep all vertices for subgraphs
	8.3	graph isomorphism	1,5,9a,9d,9e,10,13,15,17,22,35,41
13 Apr	<i>Hwk 3</i>	<i>is due tonight.</i>	
	8.4	connectivity	1,3,5
	8.6	shortest path problems	1,3,5(graph 3 only),7,9,11
20 Apr	<i>Hwk 8a</i>	<i>is due tonight.</i>	
	<b>Test 3</b>	<b>on chapter 3 &amp; 8.1-.2, plus previous</b>	
	9.1	introduction to trees	1,3,5,9,17,19,21,23
	9.2	applications of trees	1,3,5,19,21
27 Apr	<i>no class</i>		
4 May	<i>Hwk 8b</i>	<i>is due tonight.</i>	
	review	everything	
11 May	<i>Hwk 9</i>	<i>is due tonight.</i>	
	<b>Final</b>	<b>on chapters 8.3-.6 &amp; 9.1-.2, plus comprehensive</b>	
18 May	snow date	used if necessary	