

Math 430 Spring 2005 Syllabus

Tuesday		Thursday	
1/11	<b>0: Sets and Relations</b> 3, 4, 7, 11, 12, 13, 14, 15, 16, 17, 18, 27, 29, 30, 31, 32, 35, 36.	1/13	<i>DQ 1</i> <b>1: Introduction and Examples</b> 3, 8, 10, 12, 16, 20, 21, 26, 27, 30, 34, 35, 37, 38, 41.
1/18	<i>DQ 0 and 1</i> <b>Discussion of Sections 0 and 1</b>	1/20	<i>DQ 2</i> <b>2: Binary Operations</b> 5, 6, 8, 9, 12, 13, 16, 17, 18, 24, 25, 28, 31, 32, 35, 36, 37.
1/25	<i>DQ 3</i> <b>3: Isomorphic Binary Structures</b> 4, 6, 7, 8, 11, 16, 17, 20, 22, 26, 27, 28, 29, 30, 34.	1/27	<i>DQ 2 and 3</i> <b>Discussion of Sections 2 and 3</b>
2/1	<i>DQ 4</i> <b>4: Groups</b> 1, 4, 10, 12, 14, 19, 20, 21, 23, 24, 25, 28, 31, 33, 34, 41.	2/3	<b>Take-home 1 due</b> <i>DQ 5</i> <b>5: Subgroups</b> 2, 8, 19, 20, 26, 28, 29, 36, 39, 41, 42, 45, 51, 52, 53, 54, 55.
2/8	<i>DQ 4 and 5</i> <b>Discussion of Sections 4 and 5</b>	2/10	<i>DQ 6</i> <b>6: Cyclic Groups</b> 2, 6, 9, 15, 16, 18, 20, 23, 28, 32, 35, 36, 37, 40, 44, 45, 51, 55.
2/15	<b>Assessment Day</b>	2/17	<i>DQ 7</i> <b>7: Generating Sets, Cayley Digraphs</b> 1, 2, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19.
2/22	<i>DQ 6 and 7</i> <b>Discussion of Sections 6 and 7</b>	2/24	<i>DQ 8</i> <b>8: Groups of Permutations</b> 4, 7, 10, 12, 14, 15, 18, 19, 23, 25, 27, 35, 38, 39, 40, 44, 45, 46, 48, 53.
3/1	<i>DQ 9</i> <b>9: Orbits, Cycles, Alternating Gps</b> 2, 6, 7, 11, 13, 17, 18, 19, 23, 24, 27ab, 29, 30, 31, 32, 34, 35.	3/3	<b>Take-home 2 due</b> <i>DQ 8 and 9</i> <b>Discussion of Sections 8 and 9</b>
3/8	<b>Spring Break</b>	3/10	<b>Spring Break</b>

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3/15	<i>DQ 10</i>	3/17	<i>DQ 11</i>
<b>10: Cosets, Theorem of Lagrange</b> 4, 6, 7, 8, 9, 10, 11, 16, 19, 24, 26, 28, 29, 30, 32, 34, 40, 42.		<b>11: Direct Products and FGAGs</b> 2, 6, 8, 12, 13, 14, 18, 23, 24, 29, 30, 31, 32, 36, 39, 44, 46.	
3/22	<i>DQ 10 and 11</i>	3/24	<i>DQ 13</i>
<b>Discussion of Sections 10 and 11</b>		<b>13: Homomorphisms</b> 4, 8, 9, 18, 19, 21, 23, 28, 29, 32, 33, 35, 36, 37, 41, 44, 45, 46, 47, 51, 52.	
3/29	<i>DQ 18</i>	3/31	<b>Take-home 3 due</b> <i>DQ 13 and 18</i>
<b>18: Rings and Fields</b> 6, 7, 12, 15, 19, 20, 23, 24, 27, 28, 32, 33, 35, 37, 40, 42, 44, 48.		<b>Discussion of Sections 13 and 18</b>	
4/5	<i>DQ 19</i>	4/7	<i>DQ 21</i>
<b>19: Integral Domains</b> 1, 2, 7, 10, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 26, 30a.		<b>21: Fields of Quotients</b> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.	
4/12	<i>DQ 19 and 21</i>	4/14	<i>DQ 22</i>
<b>Discussion of Sections 19 and 21</b>		<b>22: Rings of Polynomials</b> 4, 6, 10, 14, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28.	
4/19	<i>DQ 23</i>	4/21	<i>DQ 22 and 23</i>
<b>23: Factorization of Polynomials</b> 2, 4, 10, 11, 12, 13, 14, 16, 17, 19, 25, 26, 28, 36.		<b>Discussion of Sections 22 and 23</b>	
4/26		4/28	<b>Take-Home 4 due</b>
<b>Catch-up Day</b>		<b>Final Exam Information</b> (attendance is mandatory)	

Final Exam: Thursday, May 5, 4:00 - 6:00 pm, Burruss 033.