

231 Syllabus

Fall 2004

Day	Date	Sxn	Topic/Homework
1-M	8/23	0.1	Numbers and Sets 0, 3, 5, 7, 11, 12, 18, 29, 32, 33, 37, 42, 49, 60, 65, 68, 75, 81, 85, 89, 93.
1-T	8/24	0.2	Equations 0, 11, 14, 15, 16, 17, 22, 25, 32, 37, 40, 46, 49, 51, 56, 63, 67, 71, 73, 79, 83, 86, 88.
1-W	8/25	0.3	Inequalities 0, 1, 2, 4, 12, 18, 23, 25, 27, 35, 43, 46, 52, 58, 66, 67, 72, 78, 89, 90.
1-F	8/27	0.4	Logic 0, 4, 10, 13, 16, 17, 21, 27, 31, 35, 41, 47, 50, 52, 56, 57, 66, 68, 76, 80, 81, 88, 92.
2-M	8/30	-	Problems Day
2-T	8/31	-	Quiz 1 (0.1, 0.2, 0.3, 0.4)
		0.5	Proofs 0, 2, 3, 5, 9, 12, 15, 20, 21, 22, 23, 24, 26, 27, 29, 31, 35, 42, 46, 48, 49.
2-W	9/1	1.1	What is a Function? 0, 1, 3, 5, 8, 12, 15, 17, 21, 22, 23, 24, 25, 27, 29, 31, 33, 35, 37, 41.
2-F	9/3	1.2	Graphs of Functions 0, 2, 4, 5, 6, 7, 9, 10, 11, 12, 13, 15, 16, 19, 22, 25, 26, 28, 29, 30, 31, 33, 35, 38, 39.
3-M	9/6	-	Problems Day
3-T	9/7	-	Quiz 2 (0.5, 1.1, 1.2)
		1.3	Linear Functions 0, 1, 3, 6, 8, 10, 11, 15, 16, 17, 21, 22, 25, 29, 31, 32, 36, 38, 39, 41, 42, 46, 48.
3-W	9/8	1.4	A Basic Library of Functions 0, 2, 6, 7, 9, 12, 14, 17, 21, 22, 25, 26, 28, 31, 32, 34, 40, 42, 44, 45, 47, 49, 50, 51.
3-F	9/10	1.5	Combinations of Functions 0, 7, 8, 12, 14, 22, 32, 33, 36, 38, 39, 41, 44, 61, 68, 75, 87, 90, 99, 103, 109, 111.
4-M	9/13	-	Problems Day
4-T	9/14	-	Quiz 3 (1.3, 1.4, 1.5)
		1.6	Transformations and Symmetry 0, 4, 7, 10, 14, 15, 18, 31, 33, 34, 35, 41, 44, 58, 62, 63, 68, 71, 72, 75, 77, 79, 85.
4-W	9/15	1.7	Inverse Functions 0, 1, 4, 6, 7, 9, 10, 12, 14, 16, 18, 21, 24, 27, 29, 31, 32, 33, 36, 38, 42, 43, 49.
4-F	9/17	2.1	Intuitive Notion of Limit 0, 1, 2, 6, 8, 10, 13, 14, 15, 16, 17, 18, 20, 22, 23, 24, 29, 30, 31, 34, 37, 39.
5-M	9/20	-	Review for Test I
5-T	9/21	-	TEST I (0.1–2.1)
5-W	9/22	2.2	Formal Definition of Limit 0, 1, 2, 4, 7, 13, 14, 15, 16, 18, 20, 21, 27, 29, 33, 39, 40, 42, 47, 52, 53, 56, 57, 60.
5-F	9/24	2.3	Delta-Epsilon Proofs 0, 1, 2, 3, 5, 9, 10, 13, 15, 16, 20, 25, 26, 28, 29, 31, 37, 38, 43.

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6-M	9/27	-	Problems Day
6-T	9/28	-	Quiz 4 (2.2, 2.3, Test I)
		2.4	Limit Rules 0, 1, 3, 7, 14, 15, 16, 17, 21, 22, 31, 33, 35, 38, 40, 43, 46, 47, 50, 51, 54, 55.
6-W	9/29	2.5	Calculating Limits 0, 1, 2, 3, 5, 6, 7, 9, 11, 13, 14, 18, 20, 21, 22, 24, 30, 35, 37, 39, 42, 44, 46, 47.
6-F	10/1	2.6	Continuity 0, 3, 5, 10, 13, 15, 20, 22, 25, 27, 28, 36, 38, 39, 42, 43, 48, 49, 52, 55, 59, 60, 61, 68.
7-M	10/4	-	Problems Day
7-T	10/5	-	Quiz 5 (2.4, 2.5, 2.6)
		2.7	Two Theorems about Continuous Functions 0, 2, 3, 6, 8, 9, 14, 15, 16, 17, 18, 19, 24, 26, 27, 33, 35, 37, 38, 44, 50, 52, 56, 61, 63.
7-W	10/6	3.1	Tangent Lines and the Derivative at a Point 0, 1, 8, 11, 12, 16, 17, 24, 30, 35, 40, 43, 47, 51, 55, 60, 64, 69, 75, 83, 87, 91, 94.
7-F	10/8	3.2	The Derivative as an Instantaneous Rate of Change 0, 3, 5, 6, 7, 8, 9, 10, 11, 12, 19, 20, 22, 24, 28, 30, 31, 32, 33, 34, 35, 37.
8-M	10/11	-	Problems Day
8-T	10/12	-	Quiz 6 (2.7, 3.1, 3.2)
		3.3	Differentiability 0, 2, 3, 4, 5, 6, 7, 9, 11, 13, 14, 17, 20, 21, 23, 24, 26, 27, 30, 33, 34, 35, 36.
8-W	10/13	3.4	The Derivative as a Function 0, 2, 7, 11, 12, 13, 15, 17, 23, 28, 35, 38, 41, 46, 50, 53, 56, 59, 63, 64, 65, 68, 71
8-F	10/15	-	Fall Break
9-M	10/18	-	Problems Day
9-T	10/19	-	Quiz 7 (3.3, 3.4)
		3.5	Basic Differentiation Rules 0, 5, 10, 18, 22, 23, 28, 29, 33, 39, 40, 46, 48, 53, 58, 65, 68, 71, 74, 75, 76, 81, 82.
9-W	10/20	3.6	Three Theorems about Tangent Lines 0, 4, 7, 11, 15, 18, 21, 25, 27, 28, 30, 34, 39, 40, 44, 47, 50, 54, 56, 60, 63, 65, 67.
9-F	10/22	3.7	The First Derivative and Function Behavior 0, 1, 5, 9, 12, 14, 17, 19, 20, 21, 22, 24, 27, 28, 30, 34, 36, 38, 42, 44, 45, 46.
10-M	10/25	-	Review for Test II
10-T	10/26	-	TEST II (2.2-3.7)
10-W	10/27	3.8	The Second Derivative and Function Behavior 0, 2, 3, 11, 15, 19, 21, 25, 30, 37, 39, 42, 46, 47, 52, 55, 58, 61, 65, 68, 69, 71, 73, 76.
10-F	10/29	4.1	The Algebra of Power Functions 0, 7, 12, 19, 22, 34, 36, 39, 42, 48, 51, 58, 61, 65, 67, 69, 72, 76, 78, 90, 93, 97, 99, 103.

Day	Date	Sxn	Topic/Homework
11-M	11/1	-	Problems Day
11-T	11/2	-	Quiz 8 (3.8, 4.1, Test II)
		4.2	Limits of Power Functions 0, 1, 2, 4, 8, 11, 15, 18, 21, 24, 25, 26, 31, 36, 43, 49, 52, 54, 57, 59, 60, 62, 65.
11-W	11/3	4.3	Derivatives of Power Functions 0, 1, 3, 4, 7, 11, 13, 14, 15, 20, 21, 23, 24, 32, 38, 42, 47, 49, 52, 59, 65, 71, 76, 77.
11-F	11/5	4.4	Graphs of Power Functions with Integer Powers 0, 3, 4, 8, 9, 11, 14, 16, 18, 19, 24, 30, 32, 36, 37, 40, 43, 45, 48, 50, 61, 57, 71.
12-M	11/8	-	Problems Day
12-T	11/9	-	Quiz 9 (4.2, 4.3, 4.4)
		4.5	Graphs of Power Functions with Rational Powers 0, 2, 6, 9, 11, 12, 14, 20, 26, 31, 34, 40, 43, 47, 48, 52, 54, 57, 59, 60, 64, 67, 72.
12-W	11/10	5.1	The Algebra of Polynomial Functions 0, 8, 10, 11, 22, 23, 31, 36, 42, 43, 45, 46, 52, 53, 59, 63, 72, 75, 78, 79, 86, 90, 95, 98.
12-F	11/12	5.2	Limits and Derivatives of Polynomial Functions 0, 5, 7, 10, 14, 15, 16, 18, 20, 21, 25, 33, 37, 41, 43, 48, 53, 57, 62, 66, 68, 71.
13-M	11/15	-	Problems Day
13-T	11/16	-	Quiz 10 (4.5, 5.1, 5.2)
		5.3	Graphing Polynomial Functions 0, 2, 3, 6, 9, 12, 16, 18, 27, 28, 35, 38, 42, 44, 46, 50, 52, 54, 56, 60, 61, 63, 64.
13-W	11/17	5.4	Optimization with Polynomial Functions 0, 2, 6, 7, 9, 11, 14, 16, 20, 22, 24, 25, 26, 28, 29, 31, 32, 34, 35, 38.
13-F	11/19	6.1	The Algebra of Rational Functions 0, 2, 4, 8, 10, 14, 15, 17, 20, 21, 23, 25, 28, 29, 31, 34, 35, 42, 43, 44, 46, 49, 53, 57.
14-M	11/22	-	Review for Test III
14-T	11/23	-	TEST III (3.8–6.1)
14-W	11/24	-	Thanksgiving Break
14-F	11/26	-	Thanksgiving Break
15-M	11/29	6.2	Limits and Asymptotes of Rational Functions 0, 3, 4, 6, 11, 13, 14, 15, 20, 24, 25, 30, 36, 37, 38, 41, 42, 43, 46, 52, 56, 58.
15-T	11/30	6.3	Derivatives of Rational Functions 0, 1, 2, 3, 4, 5, 6, 7, 11, 12, 20, 21, 26, 30, 32, 39, 41, 42, 47, 48, 50, 52.
15-W	12/1	6.4	Graphs of Rational Functions 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 18, 19, 21, 25, 26, 27, 30, 33, 34, 35, 37, 39.
15-F	12/3	-	Teacher-Course Evaluations and Final Exam Information (mandatory attendance)

Final Exam Choices:

Wednesday, December 8, 10:30 am – 12:30 pm, Burruss 033.

Friday, December 10, 10:30 am – 12:30 pm, Burruss 033.

(You will sign up for ONE of these times in the last few weeks of class.)