

Day	Date	Section	Topic/Homework
1-M	8/28	1.1, 1.2	Logistics; What is Calculus?; Mathematical Notation (from 1.2) 2, 4, 5, 8, 13, 14, 16, 20, 22, 27, 29, 30, 32, 35, 37, 38, 43, 45, 46, 50, 51, 52, 57, 59, 64, 65, 66, *67, 70, *74.
1-W	8/30	1.3	Inequalities 10, 13, 15, 22, 34, 35, 38, 41, 47, 48, 51, 54, 55, 57, 58, *60, *63.
1-R	8/31	Quiz	Quiz 1: Diagnostic
1-F	9/1	1.4	Coordinate Plane; Analytic Geometry 3, 11, 13, 15, 23, 24, 27, 30, 31, 35, 37, 41, 45, 47, 51, 52, 53, 54, 58, 63, *66, *73.
2-M	9/4	1.5	Functions 3, 6, 7, 9, 10, 11, 12, 16, 17, 18, 19, 22, 24, 29, 32, 38, 40, 41, 44, 45, 46, 51, 52, 53, 55, 59, 62, *65, *67, *73.
2-W	9/6	1.6	The Elementary Functions 3, 4, 9, 14, 15, 21, 26, 31, 33, 37, 39, 46, 51, 55, 62, 63, 67, 69, *76, *80, *84.
2-R	9/7	Quiz	Quiz 2: 1.1, 1.2, 1.3, 1.4, 1.5 Group assignments, pictures, discuss starred problems.
2-F	9/8	1.7	Combinations of Functions 3, 7, 8, 11, 12, 14, 16, 19, 20, 26, 27, 33, 37, 39, 43, 45, 47, 48, 49, 50, 52, *59, *60, *61, *62.
3-M	9/11	1.8	Mathematical Proofs and Induction 1, 4, 5, 8, 9, *11, *13 (all by induction); 1.2/*71 (contradiction); 1.3/65 (two things to prove); 1.4/*72 (compute); 1.6/*79 (use a picture); 1.7/55 (given results in 53 and 54).
3-W	9/13	2.1	The Idea of Limit 1, 4, 7, 8, 10, 12, 13 (use algebra <u>and</u> pictures for these), 21, 26, 29, 30, 40, 41, 43, 44, 47, 49, 52, 53, 58, 62, *64.
3-R	9/14	Quiz	Quiz 3: 1.6, 1.7, 1.8 Discuss starred problems.
3-F	9/15	2.2	Definition of Limit 5, 7, 18, 21, 22, 23, 26, 27, 30, 31, 32, 33, 35, *43, *44, *45, *51, 56 (don't need to use δ - ϵ here or for the next three problems), 57, 60, 63.
4-M	9/18	2.3	Some Limit Theorems 2, 3, 4, 5, 14, 17, 18, 20, 24, 27, 33, 37, 39, 41, 43, 44, 45, 46, 47, 48, 49, 50, 51, *55, *57.
4-W	9/20	2.4	Continuity 1, 2, 4 (do these algebraically), 7, 9, 11, 14, 17 (do these graphically), 18, 19, 22, 24, 29, 30, 33, 34, 36, 40, *44, *47 (use 2.2.5), *53 (use 47).

Day	Date	Section	Topic/Homework
4-R	9/21	Quiz	Quiz 4: 2.1, 2.2, 2.3 Discuss starred problems.
4-F	9/22	2.5	The Pinching Theorem: Trigonometric Limits 3, 5, 7, 8, 10, 13, 16, 18, 19, 21, 22, 26, 27, *31 (hint: change to limit as $h \rightarrow 0$ form), *34, 35, 36, 39, 40, 42, *43.
5-M	9/25	2.6	The Intermediate Value Theorem and the Extreme-Value Theorem 1, 4, 6, 9, 12, 13, 15, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, *31, *34, *37, *39.
5-T	9/26	Groups	Suggested day for working on starred problems from 2.4, 2.5, and 2.6 (in groups on your own time).
		<i>Review</i>	<i>Tuesday Evening Review Session for Test I</i> <i>6:30-8:00 p.m.</i>
5-W	9/27	3.1	The Derivative (use the <u>definition</u> of derivative everywhere in this section; no differentiation “rules”) 2, 3, 5, 8, 9, 11, 13, 16, 17, 19, 23, 24, 25, 29, 30, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 46, 47, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 61, *63, *64, *65, 66, 69, 70, 73.
5-R	9/28	TEST	TEST I: Chapter 1, Chapter 2
5-F	9/29	3.1, 3.2	The Derivative by Definition and by “Rules” <i>Finish problems from 5-W, start problems from 6-M.</i>
6-M	10/2	3.2	Some Differentiation Formulas 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 17, 20, 21, 22, 23, 26, 27, 28, 29, 30, 32 (graph pictures to check your answers for this and the next three problems), 34, 35, 40, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 55, 61, 63, 64, 65, 67, *68 (use induction), 70, *73, 75, *77.
6-W	10/4	3.3	The d/dx Notation; Derivatives of Higher Order 2, 3, 6, 8, 13, 16, 17, 19, 23, 26, 27, 29, 31, 33, 37, 39, 41, 42, 45, 46, 47, 48, 49, *51, *52, *53, *54, 55, 57, 60, *61, *62, 64, 65.
6-R	10/5	Quiz	Quiz 5: 3.1, 3.2 Go over Test I, discuss starred problems.
6-F	10/6	3.4	The Derivative as a Rate of Change 1, 2, 3, 4, 6, 7, 8, 10, 11, 14, 16, 18, 19, 23, 24, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 39, 40, 42, 43, 46, 48, *49, *50, 52, *54, *57, 67.
7-M	10/9	3.5	The Chain Rule 4, 5, 7, 9, 10, 14, 17, 18, 19, 20, 21, 24, 25, 26, 27, 28, 29, 30, 31, 34, 35, 39, 40, 42, 43, 45, 46, 48, 51, 54, 58, 60, 61, 62, 63, 64, 66, 68, *69, *75, *76.
7-W	10/11	3.6	Differentiating the Trigonometric Functions 1, 3, 4, 6, 7, 8, 11, 14, 15, 18, 24, 26, 29, 30, 32, 35, 40, 41, 48, 51, 54, 56, *57, 58, 59, 63, 64, 65, 66, 67, 68, *69, 71, *75, 78, 80.

Day	Date	Section	Topic/Homework
7-R	10/12	Quiz	Quiz 6: 3.3, 3.4, 3.5 Discuss starred problems.
7-F	10/13		FALL BREAK
8-M	10/16	3.7	Implicit Differentiation; Rational Powers 1, 4, 6, 9, 13, 16, 18, 20, 21, 22, 25, 27, 30, 31, 33, 34, 36, 39, 41, 44, 45, *47, 58, 59, 60, *62, 65.
8-W	10/18	3.8	Rates of Change Per Unit Time 1, 2, 5, 7, 8, 10, 12, 13, *15, 16, 17, 21, 22, 23, 26, 27, *31, *32, *34, *35.
8-R	10/19	Quiz	Quiz 7: 3.6, 3.7 Differentiation Game; discuss starred problems.
8-F	10/20	4.1	The Mean-Value Theorem 1, 3, 4, 6, 7, 10, 12, 13, 14, 15, 18, 21, 22, *24, *26, *33, 35, *42 (use Rolle's Theorem), 44, 45, 47, 52, 55.
9-M	10/23	4.2	Increasing and Decreasing Functions 1, 3, 4, 6, 9, 10, 11, 13, 17, 18, 22, 24, 28, 29, 32, 33, 35, 38 (find and use f'), 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, *58, 59, 63, *64, *65, 72, 73.
9-W	10/25	4.3	Local Extreme Values 1, 3, 6, 7, 10, 12, 14, 19, 20, 22, 28, *31, 33, *35 (without using a graph), 37, *41, *44, 50, 52 (read carefully!).
9-R	10/26	Quiz	Quiz 8: 3.8, 4.1, 4.2 Discuss starred problems.
9-F	10/27	4.4	Endpoint and Absolute Extreme Values 1, 2, 4, 5, 7, 9, 12, 14, 17, 20, 23, 25, 26, 31, 32, 33, 34, 36, *37, *38, *39, 43, 44, *46, 48, 49.
10-M	10/30	4.5	Some Max-Min Problems 1, 3, 4, 6, 8, 9, 13, 14, 18, 23, 24, 30, 31, 35, *39, 43, *52, *56, *59.
10-W	11/1	4.6	Concavity and Points of Inflection 1, 2, 4, 5, 8, 9, 11, 15, 16, 18, 21 (find the graphs without your calculator for these), 22, 23, 25, 27, 29, 30, 31, 32, 34, *38, *40, *43, 44, 46, 49 (read carefully!).
10-R	11/2	Quiz	Quiz 9: 4.3, 4.4, 4.5 Discuss starred problems.
10-F	11/3	4.7	Vertical and Horizontal Asymptotes; Vertical Tangents and Cusps 1, 2, 4 (do these algebraically), 5, 6, 8, 12, 13, 19, 22 (do these algebraically), 24, 25, 26, 29, 35 (by hand; no calculator for these), 36, 37, 38, 40, 43, 44, 45, 46, 47, 48, *49.

Day	Date	Section	Topic/Homework
11-M	11/6	4.8	Curve Sketching 2 (of course, no calculator for these), 4, 5, 7, 9, 12, 14, 18, 21, 24, 25, 29, 32, 34, 36, 38, 40, 41, 43, 44, 47, 48, 51, 55 (read carefully!), *56, *58.
11-T	11/7	Groups	Suggested day for working on starred problems from 4.6, 4.7, and 4.8 (in groups on your own time).
		<i>Review</i>	<i>Tuesday Evening Review Session for Test II</i> 6:30-8:00 p.m.
11-W	11/8	5.1	The Definite Integral of a Continuous Function (no integration “rules” in this section!) 1, 3, 4, 6, 9, 11, 12, 14, 15, 16, 17, *18 (prove algebraically and also draw a picture), 19 (use $L_f(P)$ and $U_f(P)$), *21 (prove algebraically and also draw a picture), 23, 24, 25, 26, 27, 28, *29, *30 (use 21, 22, and 29), *31 (use 29 and 30), 35 (typo in part (c); should refer to Exercise 33), 37, *43, 44.
11-R	11/9	TEST	TEST II: Chapter 3, Chapter 4
11-F	11/10	5.2	The Function $F(x) = \int_a^x f(t)dt$ (no integration “rules” in this section!) 2, 3, 5, 7, 9, 11, 15, 17 (to see why the chain rule is necessary here, and how to use it, consider $F(u)$ and $F(u(x))$), 18, 19 (look carefully at 5.2.5), 21, 23, 24, 25, 26, 27, 28, *29, 30, *33 (do part (b) first and use it to show part (a)).
12-M	11/13	5.3	The Fundamental Theorem of Integral Calculus 1 (use FTC for these; notice you can check your answer with your calculator’s area function), 3, 4, 6, 7, 9, 11, 12, 17, 18, 20, 22, 23, 25, 27, 29, 31, 34, 35, 36, 37, 40, 41, 42, 44, 46, 47 (split up the integral in part (b)), 50, 51, 53, 55, *57, *59, *60, *61.
12-W	11/15	5.4	Some Area Problems 1, 2, 3, 4, 6, 7, 9, 11, 13, 14, 16, 19, 21, 22, 23, 27, 29, 30, 31, 32, 33, 35, *38.
12-R	11/16	Quiz	Quiz 10: 5.1, 5.2, 5.3 Go over Test II, discuss starred problems.
12-F	11/17	5.5	Indefinite Integrals 1, 2, 3, 5, 6, 8, 10, 11, *13, 14, *16, 17, 18, 19, 21, 22, 23, 24, 26, 28, 30, *33, 35, 37, 39, 40, 42, *43, 44, 45, 50, 53.
13-M	11/20	5.6	The u-Substitution; Change of Variables 1, 4, 6, 8, 9, 10, 12, 14, 15, 16, 17, 20, 21, 22, 23, 26, 27, 30, 31 (hint: change to $\int (u-1)\sqrt{u} du$ and multiply out; similar techniques solve the rest of this block), 32, 34, 35, 36, 38, 39, 42, 44, 46, 47, 50, 51, *53, 59, 62, 63, 64, 66, 67, 69, 71, *74, *75, *76.
13-W	11/22		THANKSGIVING BREAK
13-R	11/23		THANKSGIVING BREAK
13-F	11/24		THANKSGIVING BREAK

Day	Date	Section	Topic/Homework
14-M	11/27	5.7, 5.8	Additional Properties and Theorems for Integrals From 5.7: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 22, *29, 30 (consider $g - f$), *31 (use $L_f(P)$ and $U_f(P)$ for a certain partition P), *33. From 5.8: 1, 2, 4, 5, 7, 9, 11, 13, 14, 17, 18 (draw a picture), *19, 20, 24, 25, 27, *34.
14-W	11/29	6.1	More on Area 1 (don't solve the integrals in this block, just write them down), 4, 5, 7, 8, 10, 12, 15, 17, 18, 22, 24, 26, 27, 29, 31, 36 (in this block, set up the integrals but don't solve), 37, 38, *40, 43, *44, *45.
14-R	11/30	Quiz	Quiz 11: 5.4, 5.5, 5.6, 5.7, 5.8 Discuss starred problems.
14-F	12/1	6.2	Volume by Parallel Cross Section; Discs and Washers 1, 2, 3, 5, 8, 9, 11 (verify your answer using geometry), 15, 17, 18, 19, 20, 22, 25, 26 (verify your answer using geometry), 27, 29, 30, 31, *37, 40, 41, 42, *43, *44, 46, 47, *48, 49, 50, 51, 54, 56.
15-M	12/4	6.3	Volume by the Shell Method 1, 2, 3, 5, 7, 11, 13, 14, 15, 17, 21, 23, 25, 26, 27, 28, 29, 30, 34, 39, 40, 41, 42, *46.
15-T	12/5	Groups	Suggested day for working on starred problems from 6.1, 6.2, and 6.3 (in groups on your own time). <i>Review Tuesday Evening Review Session for Test III 6:30-8:00 p.m.</i>
15-W	12/6	???	Surprise Lecture (yes, attendance is required)
15-R	12/7	TEST	TEST III: Chapter 5, Chapter 6
15-F	12/8	all	<i>Go over Test III; Final Exam Information</i>
16-S	12/10	<i>Review</i>	<i>Sunday Afternoon Review Session for the Final Exam 12:00-1:30 p.m.</i>
16-M	12/11	FINAL	Comprehensive Final Exam for section 05 (the 10:10 section). Exam Time: Monday, 10:30 a.m. - 12:30 p.m.
16-W	12/13	FINAL	Comprehensive Final Exam for section 03 (the 9:05 section). Exam Time: Wednesday, 8:00 a.m. - 10:00 a.m.