MATH 140 SEQUENCE OF TOPICS

From ${\it Calculus},$ 3rd Edition, by Briggs and Cochran

	Торіс	Assignment
2.2	Intuitive Limit Definitions	3, 5, 13, 15, 17, 19, 21, 23, 25, 51
2.3	Limit Computations	9–19 odd, 23, 25, 27, 31–67 odd, 73, 80, 85, 87, 89, 97
2.4	Infinite Limits	7, 9, 13, 21, 25, 29, 33, 37-43 odd
2.5	Limits at Infinity	5, 7, 9, 15–31 odd, 35–49 odd, 51ab, 53ab, 55ab, 63, 65, 67, 69
2.6	Continuity	5, 7, 17–29 odd, 33, 35, 37, 41, 43, 45, 49, 51, 55, 57, 63, 82, 83
2.7	Precise Definitions of Limits	19, 21, 27, 33, 39, 45, 65, 67 + Exercises in $\S 2.2$ of the Notes
3.1	Introducing the Derivative	9, 17, 21–45 odd, 51
3.2	The Derivative of a Function	11, 13, 21-39 odd, 43, 59, 71
3.3	Rules of Differentiation	7, 15, 19-39 odd, 45-53 odd, 59-67 odd, 73
3.4	The Product and Quotient Rules	9, 11, 17–53 odd, 67
3.5	Derivatives of Trigonometric Functions	5, 7, 11–51 odd, 61, 67, 73a, 75a, 77, 85
3.6	Derivatives as Rates of Change	21, 23, 25, 27, 37
3.7	The Chain Rule	15,19,2553 odd,57,61,65,69,75,79
3.8	Implicit Differentiation	5-37 odd, 43, 45, 47, 49, 51, 59, 65
3.9	Related Rates	5-27 odd, 31, 35, 37, 41, 43, 49
4.1	Extrema of Functions	13, 17, 21, 25–61 odd, 65
4.2	Mean Value Theorem	11, 13, 21, 31, 52 + Assignment in §4.2 of Notes
4.3	Strict Monotonicity and Concavity	$13,\ 1947\ \mathrm{odd},\ 5767\ \mathrm{odd},\ 73,\ 83,\ 98,\ 105$
4.4	Graphing Functions	17, 19, 23, 27, 29, 31, 35, 37, 43, 45
4.5	Optimization Problems	$9,\ 1333\ \mathrm{odd},\ 37,\ 39,\ 42,\ 53,\ 54$
4.6	Linear Approximation	$7,19,21,23,25\mathrm{ab},29\mathrm{ab},35\mathrm{ab},3745\mathrm{odd},55$
4.7	L'Hôpital's Rule	11,15,19,23,27,31,35,3959 odd,60,68
4.9	Antiderivatives	13–29 odd, 33, 37, 39–47 odd, 51, 53, 57, 59, 63, 67, 75, 83, 85
5.1	Areas Under Curves	15, 23, 25, 29, 47, 49
5.2	The Definite Integral	10,15,25,27,3343 odd,4965 odd,7583 odd
5.3	The Fundamental Theorem of Calculus	6, 13, 17, 25–81 odd, 91, 106, 107, 111
5.5	The Substitution Rule	7, 9, 13, 17-69 odd, 75-83 odd, 87, 93, 105, 113
6.2	Regions Between Curves	9-29 odd, 37-51 odd, 55-63 odd, 69
6.3	Volumes by Slicing	3, 7, 11–39 odd, 45, 49, 53
6.4	Volumes by Shells	9–23 odd, 29, 49, 53, 57
6.5	Lengths of Curves	5, 9–19 odd, 38