MTH142 Spring 2016 Calendar and Syllabus

The following calendar gives a timetable for the course. Your class may be slightly behind or ahead at any given time. Some of the problems may be done in class, others as homework. Your instructor will be more specific. You should work out all the problems below.

	Week	Sections/Events/Exams	Homework Problems
1	Jan. 26 Jan. 29	First Day of Class, Tuesday. Jan 26 7.1 - Integration by Substitution 7.2 - Integration by Parts	(7.1) 3,7,11,13,19,21,23,27,29,31,35,37,39,41, 57,61,67,128,129 (7.2) 3,5,9,11,15,17,21,27,29, 33-39 odd, 46,51,55
2	Feb. 1 Feb. 5	7.3 - Tables of Integrals 7.4 - Algebraic Identities and Trig Substitutions	(7.3) 3,7,13,17,19,29 (7.4) 1-7 odd, 8-14 even, 15-19 odd, 21-24, 31,35,39,43,48,49, 55-59 odd
3	Feb. 8 Feb. 12	7.5 - Numerical Methods for Definite Integrals 7.6 - Improper Integrals	(7.5) 1-11 odd, 13,14,16,19-22 (7.6) 5-15 odd, 23-31 odd
4	Feb. 15 Feb. 19	Drop Deadline (no W on transcript) – Feb. 16 7.7 - Comparison of Improper Integrals 8.1 - Areas and Volumes	(7.7) 1-9 odd, 13-21 odd, 26 (8.1) 5-11, 13-18, 34
5	Feb. 22 Feb. 26	Exam I – Wed. Feb 24, 6-7:30pm, CBLS 100 8.2 - Applications to Geometry 8.3 - Area and Length in Polar Coordinates	(8.2) 5-11 odd, 18,19, 25-27, 41-45 (8.3) 1-7 odd, 17, 24,28,31
6	Feb. 29 Mar. 4	8.4 - Density and Center of Mass 8.5 - Applications to Physics	(8.4) 1,3,8,13,15,26,29 (8.5) 4,5,8,9,12,13-17 odd
7	Mar. 7 Mar. 11	Drop Deadline (W on Transcript) - Mar. 8 8.7 - Distribution Functions 8.8 - Probability, Mean, and Median 9.1 - Sequences	(8.7) 1-9, 17,19,21,22 (8.8) 4,6,7,8,10 (9.1) 1-25 odd, 29-31, 41-45, 53
8	Mar. 14 Mar. 18	9.2 - Geometric Series 9.3 - Convergence of Series	(9.2) 9-17 odd, 19-27 odd, 34,40 (9.3) 5-11, 13-33 odd, 37
9	Mar. 21 Mar. 27	Spring Break - no classes	
10	Mar. 28 Apr. 1	Exam II – Wed Mar. 30, 6-7:30pm, CBLS 100 9.4 - Tests for Convergence 9.5 - Power Series and Interval of Convergence	(9.4) 5-23 odd, 27-35 odd, 39-43 odd, 61-77 od (9.5) 5-7, 11-15, 27-31
11	Apr. 4 Apr. 8	9.5 - Contd. 10.1 - Taylor Polynomials 10.2 - Taylor Series	(10.1) 1-9 odd, 13-19 odd, 22,29 (10.2) 1,5,7,9, 13-23 odd, 35-39 odd, 44
12	Apr. 11 Apr. 15	10.3 - Finding and Using Taylor Series10.4 - Error in Taylor Polynomial Approximation	(10.3) 1-11 odd, 12,14 (10.4) 1-6, 10,11
13	Apr. 18 Apr. 22	10.5 – Fourier Series 11.1 - What is a Differential Equation?	(10.5) 1,3,5,9,11,34-35,36 (11.1) 1-5, 7,15,16,19,20
14	Apr. 25 Apr. 30	Exam III – Wed. Apr. 27, 6-7:30pm, CBLS 100 11.2 - Slope Fields 11.3 - Euler's Method	(11.2) 3-8,17,18 (11.3) 1,5,7,8
15	May 2	11.4 - Separation of Variables	(11.4) 1-5 odd, 9-15 odd, 21-25 odd, 45
		Monday May 2, classes end.	

NOTE: notation like "3-9" means that all problems from 3 to 9 are to be done.