MA 114 Spring 2018 Schedule

Unit I: Techniques of Integration

Day	Date	Reading	Topic	Quizzes	Webwork Due	Webwork Topic
W	10-Jan	7.1	Integration by parts			
R	11-Jan		Worksheet 01 - Integration by Parts			
F	12-Jan	7.2	Trig Integrals			
M	15-Jan		Holiday - Martin Luther King Birthday			
T	16-Jan		Worksheet 02 - Special Trig Integrals			
W	17-Jan	7.3	Trig Substitution		A1 at 11:58PM	Integration by Parts
R	18-Jan		Worksheet 03 - Trig Substitution	Quiz 1 on Section 7.1		
F	19-Jan	7.4	Partial Fractions		A2 at 11:58 PM	Trig Integrals
M	22-Jan	7.4	Partial Fractions			
T	23-Jan		Worksheet 04 - Integration by Partial Fractions			
W	24-Jan	7.7	Midpoint, Trapezoid, and Simpson Rules		A3 at 11:58PM	Partial Fractions
R	25-Jan		Worksheet 05 - Numerical Integration	Quiz 2 on Sections 7.2-7.4		
F	26-Jan	7.7	Simpson's Rule, Error Estimates		A4 at 11:58PM	Numerical Integration
M	29-Jan	7.8	Improper Integrals			
T	30-Jan		Worksheet 06 - Simpson's Rule, Improper Integrals			
W	31-Jan	11.1	Sequences as functions from **N** to **R**		A5 at 11:58 PM	Simpson's Rule, Improper integrals
R	1-Feb		Worksheet 07 - Sequences	Quiz 3 on sections 7.7-7.8		
F	2-Feb	11.1	Sequences by recursion		A6 at 11:58 PM	Sequences
M	5-Feb		Review for Exam 1			
M	5-Feb		**Exam I Review Session, 6:00-8:00 PM, FB 200**			
T	6-Feb		Review Worksheet 08			

T	6-Feb	**Exam 01, 5:00-7:00 PM**	Covers sections 7.1-7.4, 7.7, 7.8, 11.1, web homeworks A1-A6

Unit II: Series

Day	Date	Reading	Topic	Quizzes	Webwork Due	WW Topic
W	7-Feb	11.2	Series			
R	8-Feb		Worksheet 09 - Recursive sequences, series			
F	9-Feb	11.2	Series		B1 at 11:58 PM	Recursive Sequences
M	12-Feb	11.3	Integral Test			
T	13-Feb		Worksheet 10 - Series, Integral Test			
W	14-Feb	11.4	Comparison and Limit Comparison		B2 at 11:58 PM	Series
R	15-Feb		Worksheet 11 - Comparison and Limit Comparison Tests	Quiz 4 on sections 11.1-11.2		
F	16-Feb	11.5	Alternating Series		**B3 at 11:58 PM**	Integral Test
M	19-Feb	11.6	Absolute and Conditional Convergence		**B4 at 11:58PM**	Comparison tests
T	20-Feb		Worksheet 12 - Alternating series, absolute and conditional convergence			
W	21-Feb	11.7	Ratio and Root Tests		B5 at 11:58PM	Absolute and conditional convergence
R	22-Feb		Worksheet 13 - Ratio and Root tests	Quiz 5 on sections 11.3-11.5		
F	23-Feb	11.8	Power Series		B6 at 11:58PM	Ratio and root tests
M	26-Feb	11.9	Representing functions as power series			
T	27-Feb		Worksheet 14 - Power series			
W	28-Feb	11.10	Taylor series		B7 at 11:58PM	Power series
R	1-Mar		Worksheet 15 - Taylor Series	Quiz 6 on 11.7-11.8		
F	2-Mar		Review for Exam 2		B8 at 11:58PM	Taylor and McLaurin Series
M	5-Mar		Review for Exam 2			
M	5-Mar		**Exam 2 Review Session, 6:00-8:00 PM, FB 200**			
T	6-Mar		Review Worksheet 16			

T	6-Mar	**Exam 2, 5:00-7:00 PM**	Covers sections 11.1-11.10, web homeworks B1-B8

Unit III: Applications of Integration, Calculus with Parametric and Polar Coordinates

Day	Date	Reading	Topic	Quizzes	Webwork Due	WW Topic
W	7-Mar	6.5	Average value of a function			
R	8-Mar		Worksheet 17 - Average Value of a Function			
F	9-Mar	6.2	Volumes with known cross section		**C1 at 11:58 PM**	Average Values
			Spring Break March 12-14			
M	19-Mar	6.3	Volumes of revolution - disks and washer			
T	20-Mar		Worksheet 18 - Volumes I			
W	21-Mar	6.3	Volumes of revolution by shells		C2 at 11:58PM	Volumes I
R	22-Mar		Worksheet 19 - Volumes II	Quiz 7 on sections 6.2 and 6.5		
F	23-Mar	8.1	Arc length		C3 at 11:58PM	Volumes II
M	26-Mar	8.2	Surface area			
T	27-Mar		Worksheet 20 - Arc length and surface area			
W	28-Mar	8.3	Centers of mass; moments		C4 at 11:58PM	Arc length and surface area
R	29-Mar		Worksheet 21 - Centers of mass and moments	Quiz 8 on sections 6.3, 8.1, 8.2		
F	30-Mar	10.1	Parametric equations		C5 at 11:58PM	Centers of mass and moments
M	2-Apr	10.1	Calculus with parametric equations			
T	3-Apr		Worksheet 22 - Parametric equations			
W	4-Apr	10.2	Polar coordinates		C6 at 11:58PM	Parametric equations
R	5-Apr		Worksheet 23 - Polar coordinates	Quiz 9 on sections 8.3, 10.1		
F	6-Apr		Review		C7 at 11:58PM	Calculus with parametric equations
M	9-Apr		Review			
M	9-Apr		**Exam 3 Review Session, 6:00-8:00 PM, FB 200**			
T	10-Apr		Review Worksheet 24			

T	10-Apr	**Exam 03, 5:00-7:00 PM**	Covers sections 6.2, 6.3, 6.5, 8.1-8.3, 10.1 (omit 10.2 and 10.4), web homeworks C1-C7

Unit IV: Conic Sections, Differential Equations

Day	Date	Reading	Topic	Quizzes	Webwork Due	WW Topic
W	11-Apr	10.4	Calculus with polar coordinates (arc length and area)			
R	12-Apr		Worksheet 25 - Calculus with polar coordinates			
F	13-Apr	10.5	Conic sections		**D1 at 11:58PM**	Polar coordinates
M	16-Apr	10.5	Conic sections		**D2 at 11:58 PM**	Calculus with polar coordinates
T	17-Apr		Worksheet 26 - Conic sections			
W	18-Apr	9.1	Modelling with differential equations		D3 at 11:58PM	Conic sections
R	19-Apr		Worksheet 27 - Differential equations	Quiz 10 on 10.4, 10.5		
F	20-Apr	9.2	Direction fields		D4 at 11:58PM	Differential equations
M	23-Apr	9.3	Separable equations			
T	24-Apr		Worksheet 28 - Direction Fields, separable equations			
W	25-Apr		Review for Final		D5 at 11:58PM	Direction Fields
R	26-Apr		Review Worksheet 29			
F	27-Apr		Review for Final		D6 at 11:58PM	Separable equations
T	1-May		**Final Exam Review Session, 6:00-8:00 PM,** ***Memorial Hall***			
W	2-May	**Final Exam, 8:30-10:30 PM**	Covers 6.2, 6.3, 6.5, 7.1-7.4, 7.7, 7.8, 8.1-8.3, 9.1-9.3, 10.1-10.2, 10.4-10.5, 11.1-11.10 and all web homeworks including D1-D6			