MA 114 Spring 2022 Schedule

Unit I: Techniques of Integration

Day	Date	Reading	Topic	Quizzes	Webwork Due	WeBWork Topic
Monday	10-Jan	??	Review of topics from Calculus I			
Tuesday	*11-Jan*		*Worksheet 00 – Review of Calculus I*			
Wednesday	12-Jan	7.1	Integration by parts			
Thursday	*13-Jan*		*Worksheet 01 – Integration by parts*			
Friday	14-Jan	7.2	Trig Integrals Last day to add a class		A1 at 11:58PM	Integration by Parts
Monday	17-Jan		No class – MLK day			
Tuesday	18-Jan		*Worksheet 02 - Special Trigonometric Integrals*	*Quiz 1 on Section 7.1*		
Wednesday	19-Jan	7.3	Trig Substitution			
Thursday	*20-Jan*		*Worksheet 03 – Trigonometric Substitution*			
Friday	21-Jan	7.4	Partial Fractions		A2 at 11:58 PM	Trig Integrals
Monday	24-Jan	7.4	Partial Fractions			
Tuesday	*25-Jan*		*Worksheet 04 - Integration by Partial Fractions*			
Wednesday	26-Jan	7.7	Midpoint, Trapezoid, and Simpson's Rules		A3 at 11:58PM	Partial Fractions
Thursday	*27-Jan*		*Worksheet 05 – Numerical integration*	*Quiz 2 on Sections 7.2-7.3*		
Friday	28-Jan	7.7	Simpson's Rule, Error Estimates Last day to drop without a W			

Monday	*31-Jan*	7.8	Improper Integrals		A4 at 11:58PM	Numerical Integration
Tuesday	*1-Feb*		*Worksheet 06 – Simpson's rule*			
Wednesday	2-Feb	11.1	Sequences			
Thursday	*3-Feb*		*Worksheet 07 – Sequences*	*Quiz 3 on sections 7.4, 7.7*		
Friday	4-Feb	11.1	Sequences by recursion		A5 at 11:58 PM	Simpson's Rule, Improper integrals
Monday	7-Feb		Review for Exam 1 Exam I Review Session, 4-5:30 PM, CB110			
Tuesday	*8-Feb*	Exam 1, 5:00-7:00 PM	*Review Worksheet 08* Covers sections 7.1-7.4, 7.7, 7.8, WeBWork A1-A5			
Unit II: Series						
Day	**Date**	**Reading**	**Topic**	**Quizzes**	**Webwork Due**	**WeBWork Topic**
Wednesday	9-Feb	11.2	Series			
Thursday	*10-Feb*		*Worksheet 09 - Recursive sequences, series*			
Friday	11-Feb	11.2	Series		A6 at 11:58 PM	Sequences
Monday	14-Feb	11.3	Integral Test		B1 at 11:58 PM	Recursive Sequences
Tuesday	15-Feb		*Worksheet 10 - Series, Integral Test*			
Wednesday	16-Feb	11.4	Comparison and Limit Comparison		B2 at 11:58 PM	Series
Thursday	17-Feb		*Worksheet 11 - Comparison and Limit Comparison Tests*	*Quiz 4 on sections 11.1-11.2*		
Friday	18-Feb	11.5	Alternating Series		B3 at 11:58 PM	Integral Test
Monday	21-Feb	11.6	Absolute Convergence, Ratio and Root Tests		B4 at 11:58PM	Comparison tests
Tuesday	22-Feb		*Worksheet 12 - Alternating series, absolute and conditional convergence*			
Wednesday	23-Feb	11.7	Ratio and Root Tests, Strategies for Testing Series		B5 at 11:58PM	Absolute and conditional convergence

Thursday	24-Feb		*Worksheet 13 - Ratio and Root tests*	*Quiz 5 on sections 11.3-11.5*		
Friday	25-Feb	11.8	Power Series		B6 at 11:58PM	Ratio and root tests
Monday	28-Feb	11.9	Representing functions as power series			
Tuesday	*1-Mar*		*Worksheet 14 - Power series*			
Wednesday	2-Mar	11.10	Taylor series		B7 at 11:58PM	Power series
Thursday	3-Mar		*Worksheet 15 - Taylor Series*	*Quiz 6 on sections 11.7-11.8*		
Friday	4-Mar		Review for Exam 2		B8 at 11:58PM	Taylor and McLaurin Series
Monday	7-Mar		Review for Exam 2 Exam 2 Review Session, 4-5:30 PM, CB110			
Tuesday	8-Mar	Exam 2, 5:00-7:00 PM	*Review Worksheet 16* Covers sections 11.1-11.10, WeBWork A6, B1-B8			
Unit III: Applications of Integration, Calculus with Parametric and Polar Coordinates						
Day	**Date**	**Reading**	**Topic**	**Quizzes**	**Webwork Due**	**WeBWork Topic**
Wednesday	9-Mar	6.5	Average value of a function			
Thursday	*10-Mar*		*Worksheet 17 - Average Value of a Function*			
Friday	11-Mar	6.2	Volumes with known cross section		C1 at 11:58 PM	Average Values
Monday	14-Mar		No Class – Spring Break			
Tuesday	*15-Mar*		No Class – Spring Break			
Wednesday	*16-Mar*		No Class – Spring Break			
Thursday	*17-Mar*		No Class – Spring Break			
Friday	*18-Mar*		No Class – Spring Break			
Monday	21-Mar	6.3	Volumes of revolution - disks and washer			

Tuesday	*22-Mar*		*Worksheet 18 - Volumes I*			
Wednesday	23-Mar	6.3	Volumes of revolution by shells		C2 at 11:58PM	Volumes I
Thursday	24-Mar		*Worksheet 19 - Volumes II*	*Quiz 7 on sections 6.2, 6.3*		
Friday	*25-Mar*	8.1	Arc length		C3 at 11:58PM	Volumes II
Monday	28-Mar	8.2	Surface area Last day to drop			
Tuesday	*29-Mar*		*Worksheet 20 - Arc length and surface area*			
Wednesday	30-Mar	8.3	Centers of mass; moments		C4 at 11:58PM	Arc length and surface area
Thursday	31-Mar		*Worksheet 21 - Centers of mass and moments*	*Quiz 8 on sections 6.3, 8.1, 8.2*		
Friday	*1-Apr*	10.1	Parametric Equations		C5 at 11:58PM	Centers of mass and moments
Monday	4-Apr	10.2	Calculus with parametric equations			
Tuesday	5-Apr		*Worksheet 22 - Parametric equations*			
Wednesday	6-Apr	10.3	Polar coordinates		C6 at 11:58PM	Parametric equations
Thursday	*7-Apr*		*Worksheet 23 - Polar coordinates*	*Quiz 9 on sections 8.3, 10.1*		
Friday	*8-Apr*		Review for Exam 3		C7 at 11:58PM	Calculus with parametric equations
Monday	*11-Apr*		Review for Exam 3 Exam 3 Review Session, 4-5:30 PM, CB110			
Tuesday	12-Apr	Exam 3, 5:00-7:00 PM	*Review Worksheet 24* Covers sections 6.2, 6.3, 6.5, 8.1, 8.2, 10.1, 10.2, WeBWork C1-C7			
Unit IV: Conic Sections, Differential Equations						
Day	**Date**	**Reading**	**Topic**	**Quizzes**	**Webwork Due**	**WeBWork Topic**
Wednesday	13-Apr	10.4	Calculus with polar coordinates (arc length and area)			
Thursday	*14-Apr*		*Worksheet 25 - Polar coordinates*			

Friday	15-Apr	10.5	Conic sections		D1 at 11:58PM	Polar coordinates
Monday	18-Apr	10.5	Conic sections		D2 at 11:58 PM	Calculus with polar coordinates
Tuesday	*19-Apr*		*Worksheet 26 – Conic sections*			
Wednesday	20-Apr	9.1	Modeling with differential equations		D3 at 11:58PM	Conic sections
Thursday	21-Apr		*Worksheet 27 - Differential equations*	*Quiz 10 on sections 10.4, 10.5*		
Friday	22-Apr	9.2	Direction fields		D4 at 11:58PM	Differential equations
Monday	25-Apr	9.3	Separable Equations			
Tuesday	*26-Apr*		*Worksheet 28 – Direction Fields, separable equations*			
Wednesday	27-Apr		Review for Final		D5 at 11:58PM	Direction Fields
Thursday	*28-Apr*					
Friday	29-Apr					
Monday	2-May					
Tuesday	3-May	Final exam, 6-8pm	Covers 6.2, 6.3, 6.5, 7.1-7.4, 7.7, 7.8, 8.1-8.3, 9.1-9.3, 10.1-10.5, 11.1-11.10 and all WeBWork including D1-D6			