

MA 114 Fall 2021 Schedule

Unit I: Techniques of Integration

Day	Date	Reading	Topic	Quizzes	Webwork Due	WeBWork Topic
Monday	23-Aug	7.1	Integration by parts			
Tuesday	24-Aug		Worksheet 01 - Integration by Parts			
Wednesday	25-Aug	7.2	Trig Integrals			
Thursday	26-Aug		Worksheet 02 - Special Trigonometric Integrals	Quiz 1 on Section 7.1		
Friday	27-Aug	7.3	Trig Substitution Last day to add a class		A1 at 11:58PM	Integration by Parts
Monday	30-Aug	7.4	Partial Fractions		A2 at 11:58 PM	Trig Integrals
Tuesday	31-Aug		Worksheet 03 – Trigonometric Substitution			
Wednesday	1-Sep	7.4	Partial Fractions			
Thursday	2-Sep		Worksheet 04 - Integration by Partial Fractions	Quiz 2 on Sections 7.2-7.3		
Friday	3-Sep	7.7	Midpoint, Trapezoid, and Simpson Rules		A3 at 11:58PM	Partial Fractions
Monday	6-Sep		No class – Labor Day			
Tuesday	7-Sep		Worksheet 05 – Numerical integration			
Wednesday	8-Sep	7.7	Simpson's Rule, Error Estimates			
Thursday	9-Sep		Worksheet 06 – Simpson's rule	Quiz 3 on sections 7.4, 7.7		
Friday	10-Sep	7.8	Improper Integrals Last day to drop without a W STEM Study Survey Assignment 1, due at 11:59pm		A4 at 11:58PM	Numerical Integration

Monday	13-Sep	11.1	Sequences as functions from \mathbf{N} to \mathbf{R}		A5 at 11:58 PM	Simpson's Rule, Improper integrals
Tuesday	14-Sep		Worksheet 07 – Improper Integrals			
Wednesday	15-Sep	11.1	Sequences by recursion		A6 at 11:58 PM	Sequences
Thursday	16-Sep		Worksheet 08 – Sequences	Quiz 4 on sections 7.8, 11.1		
Friday	17-Sep		Review for Exam 1 STEM Study Survey Assignment 2, due at 11:59pm			
Monday	20-Sep 20-Sep		Review for Exam 1 Exam I Review Session, 4-5:30 PM, CP 153			
Tuesday	21-Sep	Exam 01, 5:00-7:00 PM	Review Worksheet 9 Covers sections 7.1-7.4, 7.7, 7.8, WeBWork A1-A6			
Unit II: Series						
Day	Date	Reading	Topic	Quizzes	Webwork Due	WeBWork Topic
Wednesday	22-Sep	11.2	Series			
Thursday	23-Sep		Worksheet 10 – Recursive sequences, series			
Friday	24-Sep	11.2	Series		B1 at 11:58 PM	Recursive Sequences
Monday	27-Sep	11.3	Integral Test		B2 at 11:58 PM	Series
Tuesday	28-Sep		Worksheet 11 - Series, Integral Test			
Wednesday	29-Sep	11.4	Comparison and Limit Comparison		B3 at 11:58 PM	Integral Test
Thursday	30-Sep		Worksheet 12 - Comparison and Limit Comparison Tests	Quiz 5 on sections 11.1-11.3		
Friday	1-Oct	11.5	Alternating Series			
Monday	4-Oct	11.6	Absolute Convergence, Ratio and Root Tests		B4 at 11:58PM	Comparison tests
Tuesday	5-Oct		Worksheet 13 - Alternating series, absolute and conditional convergence			
Wednesday	6-Oct	11.7	Ratio and Root Tests, Strategies for Testing Series		B5 at 11:58PM	Absolute and conditional convergence

Thursday	7-Oct		Worksheet 14 - Ratio and Root tests	Quiz 6 on sections 11.4-11.6		
Friday	8-Oct	11.8	Power Series		B6 at 11:58PM	Ratio and root tests
Monday	11-Oct	11.9	Representing functions as power series			
Tuesday	12-Oct		Worksheet 15 - Power series			
Wednesday	13-Oct	11.10	Taylor series		B7 at 11:58PM	Power series
Thursday	14-Oct		Worksheet 16 - Taylor Series	Quiz 7 on sections 11.7-11.9		
Friday	15-Oct		Review for Exam 2		B8 at 11:58PM	Taylor and McLaurin Series
Monday Monday	18-Oct 18-Oct		Review for Exam 2 Exam 2 Review Session, 4-5:30 PM, CP 153			
Tuesday	19-Oct	Exam 2, 5:00-7:00 PM	Review Worksheet 17 Covers sections 11.1-11.10, WeBWork B1-B8			
Unit III: Applications of Integration, Calculus with Parametric and Polar Coordinates						
Day	Date	Reading	Topic	Quizzes	Webwork Due	WeBWork Topic
Wednesday	20-Oct	6.5	Average value of a function			
Thursday	21-Oct		Worksheet 18 - Average Value of a Function			
Friday	22-Oct	6.2	Volumes with known cross section			
Monday	25-Oct		No Class – Fall Break			
Tuesday	26-Oct		No Class – Fall Break			
Wednesday	27-Oct	6.3	Volumes of revolution - disks and washer		C1 at 11:58 PM	Average Values
Thursday	28-Oct		Worksheet 19 - Volumes I	Quiz 8 on sections 11.10, 6.5, 6.2		
Friday	29-Oct	6.3	Volumes of revolution by shells			
Monday	1-Nov	8.1	Arc length		C2 at 11:58PM	Volumes I

Tuesday	2-Nov		Worksheet 20 - Volumes II			
Wednesday	3-Nov	8.2	Surface area Last day to withdraw		C3 at 11:58PM	Volumes II
Thursday	4-Nov		Worksheet 21 - Arc length and surface area	Quiz 9 on sections 6.3, 8.1		
Friday	5-Nov	8.3	Centers of mass; moments		C4 at 11:58PM	Arc length and surface area
Monday	8-Nov	10.1	Parametric equations		C5 at 11:58PM	Centers of mass and moments
Tuesday	9-Nov		Worksheet 22 - Centers of mass and moments			
Wednesday	10-Nov	10.2	Calculus with parametric equations		C6 at 11:58PM	Parametric equations
Thursday	11-Nov		Worksheet 23 - Parametric equations	Quiz 10 on sections 8.3, 10.1, 10.2		
Friday	12-Nov		Review for Exam 3		C7 at 11:58PM	Calculus with parametric equations
Monday	15-Nov 15-Nov		Review for Exam 3 Exam 3 Review Session, 4-5:30 PM, CP 153			
Tuesday	16-Nov	Exam 03, 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	17-Nov	10.3	Polar coordinates			
Thursday	18-Nov		Worksheet 25 - Polar coordinates			
Friday	19-Nov	10.4	Calculus with polar coordinates (arc length and area)		D1 at 11:58PM	Polar coordinates
Monday	22-Nov	10.5	Conic sections		D2 at 11:58 PM	Calculus with polar coordinates
Tuesday	23-Nov		Worksheet 26 - Calculus with polar coordinates			
Wednesday	24-Nov		Thanksgiving holiday-academic holiday, No Class			
Thursday	25-Nov		Thanksgiving holiday-academic holiday, No Class			

Friday	26-Nov		Thanksgiving holiday-academic holiday, No Class			
Monday	29-Nov	10.5	Conic sections			
Tuesday	30-Nov		Worksheet 27 - Conic sections			
Wednesday	1-Dec	9.1	Modeling with differential equations		D3 at 11:58PM	Conic sections
Thursday	2-Dec		Worksheet 28 - Differential equations			
Friday	3-Dec	9.2	Direction fields STEM Study Survey Assignment 3, due at 11:59pm		D4 at 11:58PM	Differential equations
Monday	6-Dec	9.3	Separable equations		D5 at 11:58PM	Direction Fields
Tuesday	7-Dec		Worksheet 29 - Direction Fields, separable equations			
Wednesday	8-Dec		Review for Final		D6 at 11:58PM	Separable equations
Thursday	9-Dec		Review Worksheet 30			
Friday	10-Dec		Review for Final STEM Study Survey Assignment 4, due at 11:59pm			
Monday	13-Dec		Final review session, 4-5:30 PM, CP 153			
Tuesday	14-Dec	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			