

Course Calendar · MA 303 · Spring 2024

Week	Day	Date	Class Activities	Outside of Class Activities
1	MON	1/8	Lecture 1 Syllabus and Review	Reading: Homework: None
	TUE	1/9		
	WED	1/10	Lecture 2 5.2: The Eigenvalue Method for Homogeneous Systems	Reading: 5.2
	THU	1/11		
	FRI	1/12	Lecture 3 5.5: Multiple Eigenvalue Solutions (Part 1)	Reading: 5.5
2	MON	1/15	MLK Day No Lecture	Reading: None
	TUE	1/16		Homework: 5.2, Written Assignment 1
	WED	1/17	Lecture 4 5.5: Multiple Eigenvalue Solutions (Part 2)	Reading: 5.5
	THU	1/18		
	FRI	1/19	Lecture 5 5.3: A Gallery of Solution Curves of Linear Systems	Reading: 5.3
3	MON	1/22	Lecture 6 6.1: Stability and the Phase Plane	Reading: 6.1
	TUE	1/23		Homework: 5.5, 5.3, Written Assignment 2
	WED	1/24	Lecture 7 6.2: Linear and Almost Linear Systems (Part 1)	Reading: 6.2
	THU	1/25		
	FRI	1/26	Lecture 8 6.2: Linear and Almost Linear Systems (Part 2)	Reading: 6.2

Week	Day	Date	Class Activities	Outside of Class Activities
4	MON	1/29	Lecture 9 6.3: Ecological Models: Predators and Competitors	Reading: 6.3
	TUE	1/30		Homework: 6.1, 6.2, Written Assignment 3
	WED	1/31	Lecture 10 2.4: Numerical Approximation: Euler's Method	Reading: 2.4
	THU	2/1		
	FRI	2/2	Lecture 11 2.5: A Closer Look at the Euler Method	Reading: 2.5
5	MON	2/5	Lecture 12 2.6: The Runge-Kutta Method	Reading: 2.6
	TUE	2/6		Homework: 6.3, 2.4, 2.5, Written Assignment 4
	WED	2/7	Lecture 13 2.6: The Runge Kutta Method	Reading: 2.6
	THU	2/8		
	FRI	2/9	Exam 1 Review	Reading: None
6	MON	2/12	Exam 1	Reading: None
	TUE	2/13		Homework: None
	WED	2/14	Lecture 14 9.1: Periodic Functions and Trigonometric Series	Reading: 9.1
	THU	2/15		
	FRI	2/16	Lecture 15 9.2: General Fourier Series and Convergence	Reading: 9.2

Week	Day	Date	Class Activities	Outside of Class Activities
7	MON	2/19	Lecture 16 9.3: Fourier Sine and Cosine Series	Reading: 9.3
	TUE	2/20		Homework: 2.6, 9.1, 9.2, Written Assignment 5
	WED	2/21	Lecture 17 9.3: Fourier Sine and Cosine Series	Reading: 9.3
	THU	2/22		
	FRI	2/23	Lecture 18 9.4: Applications of Fourier Series	Reading: 9.4
8	MON	2/26	Lecture 19 9.4: Applications of Fourier Series	Reading: 9.4
	TUE	2/27		Homework: 9.3, 9.4, Written Assignment 6
	WED	2/28	Lecture 20 9.5: Heat Conduction and Separation of Variables	Reading: 9.5
	THU	2/29		
	FRI	3/1	Lecture 21 9.5: Heat Conduction and Separation of Variables	Reading: 9.5
9	MON	3/4	Lecture 22 9.6: Vibrating Strings and the One-Dimensional Wave Equation	Reading: 9.6
	TUE	3/5		Homework: 9.5, Written Assignment 7
	WED	3/6	Lecture 23 9.6: Vibrating Strings and the One-Dimensional Wave Equation	Reading: 9.6
	THU	3/7		
	FRI	3/8	Lecture 24 9.7: Steady-State Temperature and Laplace's Equation	Reading: 9.7

Week	Day	Date	Class Activities	Outside of Class Activities
10	MON	3/11	Spring Break	
	TUE	3/12	Spring Break	
	WED	3/13	Spring Break	
	THU	3/14	Spring Break	
	FRI	3/15	Spring Break	
11	MON	3/18	Lecture 25 9.7: Steady-State Temperature and Laplace's Equation	Reading: 9.7
	TUE	3/19		Homework: 9.6, Written Assignment 8
	WED	3/20	Lecture 26 10.1: Sturm-Liouville Problems and Eigenfunction Expansions	Reading: 10.1
	THU	3/21		
	FRI	3/22	Lecture 27 10.1: Sturm-Liouville Problems and Eigenfunction Expansions	Reading: 10.1
12	MON	3/25	Lecture 28 7.1: Laplace Transforms and Inverse Transforms	Reading: 7.1
	TUE	3/26		Homework: 9.7, 10.1, Written Assignment 9
	WED	3/27	Lecture 29 7.2: Transformation of Initial Value Problems	Reading: 7.1
	THU	3/28		
	FRI	3/29	Lecture 30 7.3: Translation and Partial Fractions	Reading: 7.3

Week	Day	Date	Class Activities	Outside of Class Activities
13	MON	4/1	Review Exam 2	Reading: None
	TUE	4/2		Homework: None
	WED	4/3	Exam 2	Reading: None
	THU	4/4		
	FRI	4/5	Lecture 31 7.3: Translation and Partial Fractions	Reading: 7.3
14	MON	4/8	Online Lecture 7.4 Derivatives, Integrals, and Products of Transforms	Reading: None
	TUE	4/9		Homework: 7.1, 7.2, 7.3, Written Assignment 10
	WED	4/10	Lecture 32 7.4: Derivatives, Integrals, and Products of Transforms	Reading: 7.4
	THU	4/11		
	FRI	4/12	Lecture 33 7.5: Periodic and Piecewise Continuous Input Functions	Reading: 7.5
15	MON	4/15	Lecture 34 7.5: Periodic and Piecewise Continuous Input Functions	Reading: 7.5
	TUE	4/16		Homework: 7.4, 7.5, Written Assignment 11
	WED	4/17	Lecture 35 7.6: Impulses and Delta Functions	Reading: 7.6
	THU	4/18		
	FRI	4/19	Lecture 36 7.6: Impulses and Delta Functions	Reading: 7.6 Homework: 7.6

Week	Day	Date	Class Activities	Outside of Class Activities
16	MON	4/22	Final Exam Review	Quiet Period The University mandates that there be no homework or quizzes due this week
	TUE	4/23		Homework: None
	WED	4/24	Final Exam Review	
	THU	4/25		
	FRI	4/26	Final Exam Review	
17	MON	4/29		
	TUE	4/30		
	WED	5/1		
	THU	5/2		
	FRI	5/3	Final Exam 3:30-5:30pm RHPH 172	