Math 240 · Differential Equations Course Schedule · Spring 2021

Monday	Wednesday	Friday
Jan 25 §1.1: Background	Jan 27 §1.2: Solutions & IVPs	Jan 29 §1.3: Direction Fields
Feb 1 §1.4: Euler's Method	Feb 3 §2.2: Separable Equations (1)	Feb 5 §2.2: Separable Equations (2) §2.3: Linear Equations (1)
Feb 8 §2.3: Linear Equations (2)	Feb 10 §2.4: Exact Equations (1)	Feb 12 §2.4: Exact Equations (2)
Feb 15 §2.6: Substitutions and Transformations (1)	Feb 17 No Class: Break	Feb 19 §2.6: Substitutions and Transformations (2)
Feb 22 Chapter 2 Review	Feb 24 EXAM 1	Feb 26 §§3.1 - 3.2: Mathematical Modeling (1)
Mar 1 §§3.1 - 3.2: Mathematical Modeling (2) §3.2: Compartmental Analysis (1)	Mar 3 §3.2: Compartmental Analysis (2)	Mar 5 §§4.1 - 4.2: Second Order Equations The Mass-Spring Oscillator
Mar 8 §4.2: Second Order Equations Homogeneous Linear Equations (1)	Mar 10 §4.2: Second Order Equations (2) §4.3: Complex Roots (1)	Mar 12 §4.3: Auxiliary Equations with Complex Roots (2)
Mar 15 §4.4: Nonhomogeneous Equations (1)	Mar 17 EXAM 2	Mar 19 §4.4: Nonhomogeneous Equations (2) §4.5: Superposition Principle (1)
Mar 22 §4.5: Superposition Principle and Undetermined Coefficients (2)	Mar 24 §4.6: Variation of Parameters (1)	Mar 26 §4.6: Variation of Parameters (2) §4.7: Variable-Coefficient Equations (1)
Mar 29 §4.7: Variable-Coefficient Equations (2)	Mar 31 §4.7: Variable-Coefficient Equations (3)	Apr 2 §4.9: A Closer Look at Free Mechanical Vibrations
Apr 5 §4.9: Mechanical Vibrations Chapter 4 Review	Apr 7 No Class: Break	Apr 9 EXAM 3
Apr 12 §§9.1 - 9.3: Review Matrix Methods and Vectors	Apr 14 §9.3: Further Linear Algebra: eigenvalues & eigenvectors	Apr 16 §9.3: Further Linear Algebra (II)
Apr 19 §9.4: Linear Systems	Apr 21 §9.5: Homogeneous Linear Systems Constant Coefficients (1)	Apr 23 §9.5: Homogeneous Linear Systems Constant Coefficients (2)
Apr 26 §9.6: Homogeneous Linear Systems Complex Eigenvalues (1)	Apr 28 §9.6: Homogeneous Linear Systems Complex Eigenvalues (2)	Apr 30 §5.4: Introduction to the Phase Plane
May 3 Notes: Qualitative Methods Visualizing Differential Equations BRING YOUR LAPTOP	May 5 EXAM 4	May 7 No Class: Reading Day