Suggested **MWF** Calendar (Spring 2023)

Week #1

Monday	Jan. 9	Lesson 1	§1.1 (Differential Equations and Mathematical Models)
Wednesday	Jan. 11	Lesson 2	§1.2 (Integrals as General and Particular Solutions)
Friday	Jan. 13	Lesson 3	§1.3 (Slope Fields and Solution Curves)

Homework due : None	**Recitation:** No Quiz

Week #2

Monday	Jan. 16	MLK Day	No Class
Wednesday	Jan. 18	Lesson 4	§1.4 (Separable Equations and Applications)
Friday	Jan. 20	Lesson 5	§1.5 (Linear First-Order Equations, Part I)

Homework due (**TUESDAY, Jan. 17**): HW 1, 2, 3	**Recitation:** Quiz #1 (covers HW 1, 2, 3)

Week #3

Monday	Jan. 23	Lesson 6	§1.5 (Linear First-Order Equations, Part II)
Wednesday	Jan. 25	Lesson 7	§1.6 (Substitution Methods and Exact Equations, Part I)
Friday	Jan. 27	Lesson 8	§1.6 (Substitution Methods and Exact Equations, Part II)

Homework due (Monday, Jan. 23): HW 4, 5	**Recitation:** Quiz #2 (covers HW 4, 5)

Week #4

Monday	Jan. 30	Lesson 9	§2.1 (Population Models)
Wednesday	Feb. 1	Lesson 10	§2.2 (Equilibrium Solutions and Stability)
Friday	Feb. 3	Lesson 11	§2.4 (Numerical Approximation: Euler's Method)

Homework due (Monday, Jan. 30): HW 6, 7, 8	**Recitation:** Quiz #3 (covers HW 6, 7, 8)

Week #5

Monday	Feb. 6	Lesson 12	§3.1 (Introduction to Linear Systems)
Wednesday	Feb. 8	Lesson 13	§3.2 (Matrices and Gaussian Elimination)
Friday	Feb. 10	Lesson 14	§3.3 (Reduced Row-Echelon Matrices)

Homework due (Monday, Feb. 6): HW 9, 10, 11	**Recitation:** Quiz #4 (covers HW 9, 10, 11)

Week #6

Monday	Feb. 13	Lesson 15	§3.4 (Matrix Operations)
Wednesday	Feb. 15	Lesson 16	§3.5 (Inverse of Matrices)
Friday	Feb. 17	Lesson 17	§3.6 (Determinants, Part I)

Homework due (Monday, Feb. 13): HW 12, 13, 14	**Recitation:** Quiz #5 (covers HW 12, 13, 14)

Homework due (**SUNDAY, Feb. 19**): HW 15

Week #7

Monday	Feb. 20	Lesson 17 (cont'd)	§3.6 (Determinants, Part II)
Tuesday	**Feb. 21**	**EXAM #1**	**Covers Lessons 1–15**
Wednesday	Feb. 22	Lesson 18	§4.1 (The Vector Space $\mathbb{R}^3$)
Friday	Feb. 24	Lesson 19	§4.2 (The Vector Space $\mathbb{R}^n$ and Subspaces)

Homework due: None	**Recitation:** No class

Week #8

Monday	Feb. 27	Lesson 20	§4.3 (Linear Combinations and Independence of Vectors)
Wednesday	Mar. 1	Lesson 21	§4.4 (Bases and Dimension for Vector Spaces)
Friday	Mar. 3	Lesson 22	§4.5 (Row and Column Spaces)

Homework due (Monday, Feb. 27): HW 16, 17, 18, 19	**Recitation:** Quiz #6 (covers HW 15-19)

Week #9

Monday	Mar. 6	Lesson 23	§ 5.1 (Intro: Second-Order Linear Equations)
Wednesday	Mar. 8	Lesson 24	§ 5.2 (General Solutions of Linear Equations)
Friday	Mar. 10	Lesson 25	§ 5.3 (Homogeneous Equations with Constant Coeff, Part I)

Homework due (Monday, Mar. 6): HW 20, 21, 22   **Recitation:** Quiz #7 (covers HW 20, 21, 22)

Week #10   Spring Break - No Class

Week #11

Monday	Mar. 20	Lesson 25 (cont'd)	§ 5.3 (Homogeneous Equations with Constant Coeff, Part II)
Wednesday	Mar. 22	Lesson 26	§ 5.3 (Homogeneous Equations with Constant Coeff, Part III)
Friday	Mar. 24	Lesson 27	§ 5.4 (Mechanical Vibrations)

Homework due (Monday, Mar. 20): HW 23, 24   **Recitation:** Quiz #8 (covers HW 23, 24)

Week #12

Monday	Mar. 27	Lesson 28	§ 5.5 (Non-homogeneous Equations and Undetermined Coefficients, Part I)
Wednesday	Mar. 29	Lesson 28 (cont'd)	§ 5.5 (Non-homogeneous Equations and Undetermined Coefficients, Part II)
Friday	Mar. 31	Lesson 29	§ 5.5 (Non-homogeneous Equations and Variation of Parameters)

Homework due (Monday, Mar. 27): HW 25, 26, 27   **Recitation:** Quiz #9 (covers HW 25, 26, 27)

Week #13

Monday	Apr. 3	Lesson 30	§ 6.1 (Introduction to Eigenvalues)
Tuesday	**Apr. 4**	**EXAM #2**	**Covers Lessons 16–27**
Wednesday	Apr. 5	Lesson 31	§ 7.1 (First-Order Systems and Applications)
Friday	Apr. 7	Lesson 32	§ 7.2 (Matrices and Linear Systems)

Homework due: None   **Recitation:** No class

Week #14

Monday	Apr. 10	Lesson 33	§ 7.3 (The Eigenvalue Method for Linear Systems)
Wednesday	Apr. 12	Lesson 33 (cont'd)	§ 7.3 (The Eigenvalue Method - complex eigenvalues)
Friday	Apr. 14	Lesson 34	§ 7.6 (Multiple Eigenvalue Solutions, Part I)

Homework due (Monday, Apr. 10): HW 28, 29, 30, 31   **Recitation:** Quiz #10 (covers HW 28, 29, 30, 31)

Week #15

Monday	Apr. 17	Lesson 34 (cont'd)	§ 7.6 (Multiple Eigenvalue Solutions, Part II)
Wednesday	Apr. 19	Lesson 35	§ 7.4 (A Gallery of Solutions Curves of Linear Systems, Part I)
Friday	Apr. 21	Lesson 36	§ 7.4 (A Gallery of Solutions Curves of Linear Systems, Part II)

Homework due (Monday, Apr. 17): HW 32, 33   **Recitation:** Quiz #11 (covers HW 32, 33)

Homework due (**SUNDAY, Apr. 23)**: HW 34, 35, 36

Week #16 (Quiet Period)

Monday	Apr. 24	Final Exam Review
Wednesday	Apr. 26	Final Exam Review
Friday	Apr. 28	Final Exam Review

Homework due: None   **Recitation:** Final Exam Review