MA262 Course Calendar-Lectures on Tuesdays and Thursdays and Friday Recitations

TEXT: *Differential Equations & Linear Algebra*, 4th edition, by Edwards, Penney, and Calvis, published by Pearson

Week 1:
Aug 24: Lesson 1: Sec 1.1 (Differential Equations and Mathematical Models)
and Lesson 2: Sec 1.2 (Integrals as General and Particular Solutions)
Aug 26: Lesson 3: Sec 1.3 (Slope Fields and Solution Curves)
Aug 27: No quiz

Week 2:
Aug 30: Homework Due: Lessons 1,2 and 3.
Aug 31: Lesson 4: Sec 1.4 (Separable Equations and Applications)
and Lesson 5: Sec 1.5 (Linear First-Order Equations
Sept 2: Lesson 6: Sec 1.5 (Linear First-Order Equations)
Sept 3: Quiz 1 covers lessons 1, 2 and 3. Handwritten homework 1 and 2 are due.

Week 3:
Sep 6: Homework Due: Lessons 4, 5 and 6.
Sep 7: Lesson 7: Sec 1.6 (Substitution Methods and Exact Equations)
and Lesson 8: Sec 1.6 (Substitution Methods and Exact Equations)
Sep 9: Lesson 9: Sec 2.1 (Population Models)
Sep 10: Quiz 2 covers lessons 4, 5 and 6. Handwritten homework 3,4 and 5 are due.

Week 4:
Sep 13: Homework Due: Lessons 7, 8 and 9.
Sep 14: Lesson 10: Sec 2.2 (Equilibrium Solutions and Stability)
Sep 16: Lesson 11: Sec 2.4 (Numerical Approximation: Euler's Method)
and Lesson 12: Sec 3.1 (Introduction to Linear Systems)
Sep 17: Quiz 3 covers lessons 7, 8 and 9. Handwritten homework 6 and 7 are due.

Week 5:
Sep 20: Homework Due: Lessons 10, 11 and 12
Sep 21: Lesson 13: Sec 3.2 (Matrices and Gaussian Elimination)
and Lesson 14: Sec 3.3 (Reduced Row-Echelon Matrices)
Sep 23: Lesson 15: Sec 3.4 (Matrix Operations)
Sep 24: Quiz 4 covers lessons 10, 11 and 12. Handwritten homework 8 and 9 are due.

Week 6:
Sep 27: Homework Due: Lessons 13, 14 and 15
Sep 28: Lesson 16: Sec 3.5 (Inverse of Matrices)
Sep 30: Lesson 17: Sec 3.6 (Determinants)
Oct 1: Quiz 5 covers lessons 13, 14 and 15. Handwritten homework 10,11 and 12 are due.

Week 7:

Oct 4: Exam 1 – 8:00 to 9:00 p.m. Covers lessons 1 to 16

Oct 5: Homework Due: Lessons 16 and 17 (notice unusual day)

Oct 5: Lesson 18: Sec 4.1 (The Vector Space $\mathbf{R}^3$)

and Lesson 19: Sec 4.2 (The Vector Space $\mathbf{R}^n$ and Subspaces)

Oct 7: Lesson 20: Sec 4.3 (Linear Combinations and Independence of Vectors)

Oct 9: No recitation (to compensate for the evening exam). No quiz.

Week 8:

Oct 11: Homework Due: Lessons 18, 19 and 20

Oct 12. NO CLASS – October Break

Oct 14: Lesson 21: Sec 4.4 (Bases and Dimension for Vector Spaces)

Oct 15: Quiz 6 covers lessons 16 to 20. Handwritten homework 13 to 17 are due.

Week 9:

Oct 18: Homework Due: Lesson 21

Oct 19: Lesson 22: Sec 4.5 (Row and Column Spaces

Oct 21: Lesson 23: Sec 5.1 (Intro: Second-Order Linear Equations)

Oct 22: Quiz 7 lesson 21. Handwritten homework 18 is due.

Week 10:

Oct 25: Homework Due: Lessons 22 and 23

Oct 26: Lesson 24: Sec 5.2 (General Solutions of Linear Equations)

Oct 28: Lesson 25: Sec 5.3 (Homogeneous Equations with Constant Coeff)

and Lesson 26: Sec 5.3 (Homogeneous Equations with Constant Coeff)

Oct 29: Quiz 8 covers lessons 22 and 23. Handwritten homework 19 and 20 are due.

Week 11:

Nov 1: Homework Due: Lessons 24, 25 and 26

Nov 2: Lesson 27: Sec 5.4 (Mechanical Vibrations)

Nov 4: Lesson 28: Sec 5.5 (Non-hom Eqns and Und. Coeff.)

Nov 5: Quiz 9 covers lesson 24, 25 and 26. Handwritten homework 21 and 22 are due.

Week 12:

 Nov 8- Exam 2- 8:00 p.m. to 9:00 p.m., covers lessons 17 to 27.

 Nov 9: 5: Homework Due: Lesson 27, 28 (Notice unusual day)

Nov 9:   Lesson 29: Sec 5.5 (Non-homogeneous Equations Var. Par)

Nov 11: Lesson 30: Sec 6.1 (Introduction to Eigenvalues)

Nov 12: No recitation class (to compensate for the evening exam). No quiz.

Week 13:
Nov 15: Homework Due: Lessons 29 and 30
Nov 16: Lesson 31: Sec 7.1 (First-Order Systems and Applications)
Nov 18: Lesson 32: Sec 7.2 (Matrices and Linear Systems)
Nov 19: Quiz 10 covers lessons 27 to 30. Handwritten homework 23 to 26 are due.

Week 14:
Nov 22: Homework Due: Lessons 31 and 32
Nov 23: No class Thanksgiving break
Nov 25: No class Thanksgiving break
Nov 26: No class Thanksgiving break

Week 15:
Nov 29: No homework Due
Nov 30: Lesson 33: Sec 7.3 (The Eigenvalue Method for Linear Systems)
Dec 2: Lesson 34: Sec 7.6 (Multiple Eigenvalue Solutions)
Dec 3: Quiz 11. Handwritten homework 27 and 28 are due

Week 16:
Dec 6: Homework Due: Lessons 33 and 34.
Dec 7: Lesson 35: Sec 7.4 (A Gallery of Solutions Curves of Linear Systems)
and Lesson 36: Sec 7.4 (A Gallery of Solutions Curves of Linear Systems)
Dec 9: Review for the final exam
Dec 10: No quiz. Handwritten homework 29 to 31 are due
Dec 10:   Homework 35 and 36 due (Notice Unusual day)

Week 17: Final exams. Final exam to be scheduled by Purdue. Exam covers lessons 1 to 36