# MA262 Course Calendar- TTH Lectures

Week 1:

Aug 23: Lesson 1: Sec 1.1 (Differential Equations and Mathematical Models)

and Lesson 2: Sec 1.2 (Integrals as General and Particular Solutions)

Aug 25: Lesson 3: Sec 1.3 (Slope Fields and Solution Curves)

Recitation: No quiz

Week 2:

Aug 29: Homework Due: Lessons 1,2 and 3.

Aug 30: Lesson 4: Sec 1.4 (Separable Equations and Applications)

and Lesson 5: Sec 1.5 (Linear First-Order Equations

Sept 1: Lesson 6: Sec 1.5 (Linear First-Order Equations, continuation; examples)

Recitation: Quiz 1 covers lessons 1, 2 and 3.

Week 3:

Sep 5: Labor Day (no homework due)

Sep 6: Homework Due: Lessons 4, 5 and 6. (Notice unusual date)

Sep 6: Lesson 7: Sec 1.6 (Substitution Methods and Exact Equations)

and Lesson 8: Sec 1.6 (Substitution Methods and Exact Equations)

Sep 8: Lesson 9: Sec 2.1 (Population Models)

Recitation: Quiz 2 covers lessons 4, 5 and 6.

Week 4:

Sep 12: Homework Due: Lessons 7, 8 and 9.

Sep 13: Lesson 10: Sec 2.2 (Equilibrium Solutions and Stability)

Sep 15: Lesson 11: Sec 2.4 (Numerical Approximation: Euler’s Method)

and Lesson 12: Sec 3.1 (Introduction to Linear Systems)

Recitation: Quiz 3 covers lessons 7, 8 and 9.

Week 5:

Sep 19: Homework Due: Lessons 10, 11 and 12

Sep 20: Lesson 13: Sec 3.2 (Matrices and Gaussian Elimination)

and Lesson 14: Sec 3.3 (Reduced Row-Echelon Matrices)

Sep 22: Lesson 15: Sec 3.4 (Matrix Operations)

Recitation: Quiz 4 covers lessons 10, 11 and 12.

Week 6:

Sep 26: Homework Due: Lessons 13, 14 and 15

Sep 27: Lesson 16: Sec 3.5 (Inverse of Matrices)

Sep 29: Lesson 17: Sec 3.6 (Determinants)

Recitation: Quiz 5 covers lessons 13, 14 and 15.

Week 7:

Oct 3: Homework Due: Lessons 16 and 17

Oct 4: Lesson 18: Sec 4.1 (The Vector Space **R**3)

and Lesson 19: Sec 4.2 (The Vector Space **R***n* and Subspaces)

Oct 6: Lesson 20: Sec 4.3 (Linear Combinations and Independence of Vectors)

Oct 6: Exam 1 – 8:00 to 9:00 p.m. Covers lessons 1 to 16

No recitation to compensate for the evening exam. No quiz.

Week 8**:**

Oct 11. NO CLASS – October Break

Oct 12: Homework Due: Lessons 18, 19 and 20 (notice unusual date)

Oct 13: Lesson 21: Sec 4.4 (Bases and Dimension for Vector Spaces)

Recitation: Quiz 6 covers lessons 16 to 20.

Week 9:

Oct 17: Homework Due: Lesson 21

Oct 18: Lesson 22: Sec 4.5 (Row and Column Spaces)

Oct 20: Lesson 23: Sec 5.1 (Intro: Second-Order Linear Equations)

Recitation: Quiz 7 covers lesson 21.

Week 10:

Oct 24: Homework Due: Lessons 22 and 23

Oct 25: Lesson 24: Sec 5.2 (General Solutions of Linear Equations)

Oct 27: Lesson 25: Sec 5.3 (Homogeneous Equations with Constant Coeff)

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

Recitation: Quiz 8 covers lessons 22 and 23.

Week 11:

Oct 31: Homework Due: Lessons 24, 25 and 26

Nov 1: Lesson 27: Sec 5.4 (Mechanical Vibrations)

Nov 3: Lesson 28: Sec 5.5 (Non-hom Eqns and Und. Coeff.)

Recitation: Quiz 9 covers lesson 24, 25 and 26.

Week 12:

Nov 7: Homework Due: Lesson 27, 28

Nov 8: Lesson 29: Sec 5.5 (Non-homogeneous Equations Var. Par)

Nov 10: Lesson 30: Sec 6.1 (Introduction to Eigenvalues)

Nov 10- Exam 2- 8:00 p.m. to 9:00 p.m. Exam covers lessons 17 to 28.

No recitation class to compensate for the evening exam. No quiz.

Week 13:

Nov 14: Homework Due: Lessons 29 and 30

Nov 15: Lesson 31: Sec 7.1 (First-Order Systems and Applications)

Nov 17: Lesson 32: Sec 7.2 (Matrices and Linear Systems)

Recitation: Quiz 10 covers lessons 27 to 30.

Week 14**:**

Nov 21: Homework Due: Lessons 31 and 32

Nov 22: Lesson 33: Sec 7.3 (The Eigenvalue Method for Linear Systems)

Nov 24: No class Thanksgiving break

Recitation: No class Thanksgiving break

Week 15**:**

Nov 28: Homework due: Lesson 33

Nov 29: Lesson 34: Sec 7.6 (Multiple Eigenvalue Solutions)

Nov 30: Homework due: Lesson 34. Notice Unusual date. No penalty if submitted by December 5.

Dec 1: 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 2: Homework due: Lessons 35 and 36. Notice unusual date. No penalty if submitted by Dec 5th.

Recitation: Quiz 11. Covers lessons 31 to 34.

Week 16**:**

Dec 5: No Homework due

Dec 6: Review for the final exam

Dec 8: Review for the final exam

Recitation: No quiz. Review for the final exam

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