

## MA 262 Course Schedule + Homework Problems List

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

- **HANDWRITTEN** **homework problems (the boldface problems):** From the textbook. These do NOT need to be turned in.
- **ONLINE** **homework problems using MyMathLab** through [Brightspace](#)

Lesson 1: Sec 1.1 (Differential Equations and Mathematical Models) 15, 19, 21, 23, 25, 31, 35,  
Lesson 2: Sec 1.2 (Integrals as General and Particular Solutions) 1, 5, 7, 11, 13, 21, **35, 37**  
Lesson 3: Sec 1.3 (Slope Fields and Solution Curves) 3, 5, 22, 25, **27, 30**  
Lesson 4: Sec 1.4 (Separable Equations and Applications) 1, 4, 6, 19, 22, 33, 35, **29, 49**  
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Lesson 7: Sec 1.6 (Substitution Methods and Exact Equations) 1, 5, 9, 15, 17, 19, 27  
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Lesson 11: Sec 2.4 (Numerical Approximation: Euler's Method) 1, 5, 27  
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Lesson 13: Sec 3.2 (Matrices and Gaussian Elimination) 3, 5, 9, 11, 15, 24, **13, 23**  
Lesson 14: Sec 3.3 (Reduced Row-Echelon Matrices) 3, 9, 14, 19, 21, 23, **24**  
Lesson 15: Sec 3.4 (Matrix Operations) 2, 3, 5, 7, 9, 10, 14, 21, **15, 17**  
Lesson 16: Sec 3.5 (Inverse of Matrices) 1, 5, 9, 13, 21, 27, **28**  
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Lesson 19: Sec 4.2 (The Vector Space  $\mathbf{R}^n$  and Subspaces) 1, 3, 5, 15, 19, **21**  
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Lesson 21: Sec 4.4 (Bases and Dimension for Vector Spaces) 3, 5, 9, 13, 15, 19, **23**  
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Lesson 27: Sec 5.4 (Mechanical Vibrations) 3, 4, 13, 15, 17, 19, **35**  
Lesson 28: Sec 5.5 (Non-hom Eqns and Und. Coefficients) 1, 2, 3, 4, 8, 10, 13, 15, 19, **21, 22, 24, 29**  
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