
21-260: Differential Equations
Midterm 3 Review

Reading: Sections 7.9, 3.1-3.5, 3.7, 3.8, 6.1-6.6.

Skills:

- 1) Find the general solution for a first order, linear, constant coefficient, non-homogeneous system.
- 2) Compute solutions to second order, linear, constant coefficient, homogeneous differential equations.
- 3) Use the method of undetermined coefficients to solve second order, linear, constant coefficient, non-homogeneous differential equations.
- 4) Use second order, linear, constant coefficient differential equations to model mechanical vibrations.
- 5) Compute Laplace transforms and inverse Laplace transforms.
- 6) Use Laplace transforms to compute solutions to linear differential equations with constant coefficients.

Practice: See <http://www.math.cmu.edu/~gheorgh/prac260.html>.
Midterm 3 practice Quiz (ungraded) is available on WileyPlus.