MATH 256 (Section 103)
Differential Equations
Session 2015W, Term 1 (Sep–Dec 2015)

http://www.math.ubc.ca/∼nagata/m256/

Description:

- From the UBC Calendar: "Linear ordinary differential equations, Laplace transforms, Fourier series and separation of variables for linear partial differential equations. ..."

- Unlike the (outdated) calendar description, this version of the course is intended for students in the EECE program.

Topic prerequisites:

- Integral calculus including some ordinary differential equations (e.g. MATH 101)

- Linear systems including eigenvalues of matrices (e.g. MATH 152)

- Corequisite: multivariable calculus including partial derivatives (e.g. MATH 253)

Instructor:

- Section 103: Wayne Nagata (office: Math 112, e-mail: nagata@math.ubc.ca)

Textbook:

- W.E. Boyce and R.C. DiPrima, *Elementary Differential Equations and Boundary Value Problems*, Wiley (10th Edition, 2012).

Topics:

1. Introduction [Chapter 1]

2. First order ordinary differential equations [Chapter 2]

3. Second order linear ordinary differential equations [Chapter 3]

4. The Laplace transform [Chapter 6]

5. Systems of first order linear ordinary differential equations [Chapter 7]

6. Partial differential equations and Fourier series [Chapter 10]