MATH 215 – Elementary Differential Equations I MATH 255 – Ordinary Differential Equations Session 2017W, Term 2 (Jan–Apr 2018) Course Outline

Textbook: W.E. Boyce, R.C. DiPrima, D.B. Meade: *Elementary Differential Equations and Boundary Value Problems*, 11th (or 10th) Edition.

Topics:

- 1. Introduction and First Order Differential Equations (Chapters 1, 2)
- 2. Second Order Linear Equations (Chapter 3)
- 3. The Laplace Transform (Chapter 6)
- 4. Systems of First Order Linear Equations (Chapter 7)
- 5. Numerical Methods (Chapter 8)
- 6. Nonlinear Differential Equations and Stability (Chapter 9)