

MATH 5405 – Ordinary Differential Equations – Fall 2017

Instructor: Dr. Lucy Campbell

Office: 4269 Herzberg Building

Office hours: to be decided

Phone: 520-2600 Ext. 1208

E-mail: campbell@math.carleton.ca

Web-page: <http://www.math.carleton.ca/~campbell>

Lectures: Tues/Thurs 11:30–1:00, starting Thursday September 7.

Course web-site: <http://www.math.carleton.ca/~campbell/ODEs> and on **cuLearn**.

Topics:

- Introduction. Review of elementary differential equations and analysis.
- Existence and uniqueness theorems.
- Linear and nonlinear systems.
- Boundary-value and eigenvalue problems.

References:

- L. Perko, Differential Equations and Dynamical Systems
- W. Walter, Ordinary Differential Equations

Prerequisites: Undergraduate level differential equations and analysis.

Grading scheme:

The final grade will be calculated as:

25% 4 Assignments

25% Midterm exam (during class time)

50% End-of-term exam (during the exam period in December)

Students are required to take the midterm exam and do all 4 assignments except in case of documented illness or other emergency situation beyond your control, in which case the final exam will be counted for the missing portion of grades. There will be no make-up tests.

Comprehensive exam:

The final exam for the course may be counted towards the Comprehensive Exam requirement for Ph.D. students in the Ottawa-Carleton Institute.

Fall Break: There will be no classes from October 23–27.

Academic Accommodation:

The Paul Menton Centre for Students with Disabilities (PMC) provides services to Carleton University students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodation in this course, please contact the PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, no later than two weeks before the midterm exam, if accommodation is needed for the exam. After requesting accommodation from the PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodation for the formally-scheduled exam (if applicable). For pregnancy or religious obligations, write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.