

Faculty of Science Course Syllabus
Department of Mathematics and Statistics
Math 3120
Differential Equations II
Summer (B) 2019

Instructor(s): Kunpeng Wang KunpengWang@dal.ca Chase 312

Lectures: MW 6:05 pm-8:55 pm ROWE MANAG 1009

Laboratories: N/A

Tutorials: N/A

Course Description

The topics discussed are of great importance to any student interested in applied mathematics. Areas include Fourier series, orthogonal polynomials, Sturm-Liouville problems, the classical partial differential equations, and some applications to physics, chemistry and engineering.

Course Prerequisites

MATH 2120.03 or MATH 2135.03 or PHYC 2140.03

Course Objectives/Learning Outcomes

Students should be able to solve second order ODEs by power series methods and Fourier series methods, and solve eigenvalue and boundary value problems.

Course Materials

Differential Equations for Engineers by Jiri Lebl, <http://www.jirka.org/diffyqs/>

Course Assessment

Weekly assignments, midterm, final exam

Component	Weight (% of final grade)	Date
<i>Midterm</i>	20%	July 29, 2019 (2 hours in class)
<i>Final exam</i>	50%	Aug 19, 2019 (3 hours in class)
<i>Assignments</i>	30%	

Other course requirements

Attendance is strongly encouraged.

Conversion of numerical grades to Final Letter Grades follows the Dalhousie Common Grade Scale

A+ (90-100)	B+ (77-79)	C+ (65-69)	D	(50-54)
A (85-89)	B (73-76)	C (60-64)	F	(<50)
A- (80-84)	B- (70-72)	C- (55-59)		

Course Policies

Late homework will not be accepted except with my prior permission. A missed midterm cannot be written at another time. If you miss the midterm without my prior permission, then it will count as 0. Exceptions are made in two cases: (1) if you obtain my prior permission to miss a midterm, or (2) if you have an officially valid excuse such as a medical doctor's note. In these cases, the weight of the missed midterm will be shifted to the final exam (i.e., the final exam will then count 70% instead of 50%). There is not make-up option for the final exam, except if you have an officially valid excuse of which I am notified prior to the exam (such as a medical doctor's note).

Course Content

Chapters 7, 4, 5 and (parts of) 8 in the textbook