# Math 4190/5190 – Ordinary Differential Equations Winter 2010/11

InstructorRobert MilsonOffice Hours203 Chase, MF 12:30-13:30, W 13:30-14:30Emailrmilson@dal.caTextOrdinary Differential Equations, by V.I. Arnold)Webhttp://www.mathstat.dal.ca/4190

## Syllabus

- (1) Vector fields and flows.
- (2) Foundations: existence, uniqueness, rectification.
- (3) Symmetries and exact solutions.
- (4) Linear equations.
- (5) Singular points and stability.
- (6) ODEs on manifolds.

#### 5190 Assessment - Graduate students

- 40% 5 Assignments.
- 40% Take-home final exam.
- 20%  $\,$  Project: write-up and in-class presentation.

#### 4190 Assessment - Undergraduate students

- 60% 5 Assignments (reduced requirements).
- 40% Take-home final exam (reduced requirements).

GRADE EQUIVALENTS.

90-100	A+	75-79	B+	62-64	C+	50 - 54	D
85-89	А	70-74	В	58-61	С	0 - 49	F
80-84	A-	65-69	В-	55-57	C-		

### **Policies and Information**

- (1) Students are encouraged to study and to discuss the assignment problems. However, the assignment write-up must be performed in a strictly independent and individual manner. Jointly prepared assignments must be clearly marked as such, and will incur penalties.
- (2) The final exam solutions must be a strictly individual effort. Discussion and cooperation with any other individual is not permitted.
- (3) Without prior arrangement, late assignments will incur substantial penalties.
- (4) Students with disabilities are encouraged to register as quickly as possible at the Student Accessibility Services if they want to receive academic accommodations. To do so please phone 494-2836, e-mail access@dal.ca, drop in at the Killam G28, or visit via the web at www.studentaccessibility.dal.ca
- (5) Students can get help for this course in the Learning Centre, which is located in Room 008, in the basement of the Chase Building.