

## FACULTY OF SCIENCE Department of Mathematics and Statistics

## Applied Mathematics 307

## Differential Equations for Engineers

(see Course Descriptions for the applicable academic year: <a href="http://www.ucalgary.ca/pubs/calendar/">http://www.ucalgary.ca/pubs/calendar/</a>)

## Syllabus

| <u>Topics</u>  |             | Number<br>of hours |
|--|-------------|--------------------|
| Introduction: definitions, existence, uniqueness                 |             | 1                  |
| First order equations, applications                              |             | 8                  |
| Systems, applications to second and fourth order equations       |             | 10                 |
| Laplace transforms   |             | 4                  |
| Series, Taylor series  |             | 9                  |
| Series solutions to second order ordinary differential equations |             | 4                  |
|  | TOTAL HOURS | 36                 |

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98.06.11 Effective: Fall 1998 prereq change Fall 2008 WEC.jlong