

The University of Western Ontario  
London Canada  
Department of Applied Mathematics

**APPLIED MATHEMATICS 2270A**  
Course Outline  
2016

**Instructors:**

Prof. B. Tudose (Office MC 286) Section 001: M W F 8:30AM-9:30AM in SSC 2050  
Prof. K. Nguyen (Office MC 282) Section 002: M W F 8:30AM-9:30 AM in MC 110  
Prof. A. MacIsaac (Office MC 285) Section 003: M W F 9:30AM-10:30AM in NSC 1

**Tutorials:**

- Tutorial 004 F 12:30PM-1:30PM SSC 2036
- Tutorial 005 F 10:30AM-11:30AM SEB 2100
- Tutorial 006 F 11:30AM-12:30PM UCC 37
- Tutorial 008 F 12:30PM-1:30PM SSC 3022
- Tutorial 009 F 10:30AM-11:30AM SEB 2202
- Tutorial 011 F 11:30AM-12:30PM SEB 2202
- Tutorial 012 W 3:30PM-4:30PM SSC 2036

**Website:**

Course announcements, material and information will be posted at <https://owl.uwo.ca>

**Text:**

- **Advanced Engineering Mathematics**, 5<sup>th</sup> edition, Zill and Wright, ISBN 978-1-4496-9172-1

**Course Description:**

This (half) course is designed to provide all second year engineering students with an introduction to the field of differential equations, with special emphasis on methods and applications that are most useful in the engineering sciences. Topics include first order differential equations of various types, higher order differential equations and methods of solving them, initial and boundary value problems, applications to mass-spring systems and electric RLC circuits, Laplace transform and its use for solving differential equations, systems of linear differential equations, orthogonal functions and Fourier series.

**Method of Evaluation:**

20% quizzes

30% midterm exam- Saturday, October 22, 2016, 7:00pm-9:00pm

50% Final Exam

**Attendance:**

Attendance is not mandatory but highly recommended. All material in the lecture up to the end of the course can be considered testable. In addition, extra material covered in lectures can be tested in quizzes, tests and exams. Dates for quizzes will be announced in class. Absence from class on the day of announcement is not a valid excuse for missing those dates.

**Missing Quizzes or Exams:**

Missing an exam or quiz will result a grade of Zero except when permission is granted from Engineering Student Services. If permission is granted, a prorated mark will be assigned. There will be no make up for quizzes or midterm.

**Registration in Tutorials:**

Students will not receive credit for writing quizzes in tutorial sections in which they are not registered.

**Addendum to all Applied Mathematics Course Outlines:**

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to your faculty's Dean Office as soon as possible and contact your instructor immediately. It is the student's responsibility to make alternative arrangements with their instructors once the accommodation has been approved and the instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from your faculty's Dean's Office immediately.

For further information please see: <http://studentservices.uwo.ca/secure/index.cfm>

A student requiring academic accommodation due to illness, should use the Student Medical Certificate when visiting an off-campus medical facility or request a Records Release Form (located in the Dean's Office) for visits to Student Health Services. The form can be founded at: [http://studentservices.uwo.ca/secure/medical\\_document.pdf](http://studentservices.uwo.ca/secure/medical_document.pdf)

**Mental Health Statement:**

Students who are in emotional/mental distress should refer to Mental Health@Western

<http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.