

## Western University

### APPLIED MATHEMATICS 1413 Applied Mathematics for Engineers I Course Outline 2014-2015

#### Instructors:

<b>Prof. A. MacIsaac:</b>	Section 001 M W F 9:30-10:30 AM Tutorial 004 T 1:30-2:30 PM Tutorial 005 W 11:30-12:30 PM	SH 3345 SSC 2028 SH 3345	Office MC 270
<b>Prof. K. Nguyen:</b>	Section 002 M W F 12:30-1:30 PM Tutorial 006 Th 11:30-12:30 AM	3M 3250 3M 3250	Office MC 259
<b>Prof. B Tudose:</b>	Section 003 M W 11:30-12:30 PM F 11:30-12:30 PM Tutorial 007 Th 2:30-3:30 PM	HSB 40 UCC 146 SEB 1200	Office MC 286
<b>Prof. T. Moschandreou:</b>	Section 008 M W F 9:30 – 10:30 AM Tutorial 009 T 1:30-2:30 PM Tutorial 010 W 11:30-12:30 PM	HSB 35 first term, B&GS 0165 second term. SSC 2028 SH 3345	Office MC 259

#### Texts:

- *Calculus: A Complete Course, 8<sup>th</sup> edition*, Adams and Essex, ISBN: 978-0-321-78107-9 (Required)
- *Mathematical Handbook, 2<sup>nd</sup> ed.*, by Spiegel & Liu, ISBN# 0-07-03820-34 (Suggested)

#### Overview of the Course:

Limits, continuity, differentiation of functions of one variable with applications, extreme values, integration, the fundamental theorem of calculus, methods and applications of integration to areas, volumes and engineering applications. Sequences and series, convergence, power series. Vector functions, partial differential calculus, gradients, directional derivatives and applications.

A list of suggested exercises will be provided; it is strongly recommended that you solve all of them.

#### Method of Evaluation:

20% quizzes (approximately one every two weeks)

20% 1st Midterm Exam - **Saturday, November 8, 2014, 7 pm - 9pm**

20% 2nd Midterm Exam - **Saturday, February 7, 2015, 7 pm - 9pm**

40% Final Exam - April Examination Period

Examinations will be *closed book*. *No* computational aids will be permitted.

**There will be no 100% option for the final exam.**

## Western University

### **Missing Quizzes and Exams:**

Missing an exam or quiz will result in a grade of zero for that exam or quiz, unless permission is granted from Engineering Student Services. If permission is granted, a prorated mark will be assigned. There will be **no makeups for quizzes or midterms.**

### **Registration in Tutorials and Lecture Sections**

Students **will not receive credit** for writing quizzes in tutorial sections in which they are not registered. Each tutorial session is linked to a particular lecture section (as indicated above) and quizzes will be set according to the instructor of that section. You are expected to know which lecture section and tutorial section you are registered in and your attendance at each is required.

### **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's Office as soon as possible and contact your instructor immediately. It is the student's responsibility to make alternative arrangements with their instructor 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 found here: [https://studentservices.uwo.ca/secure/medical\\_document.pdf](https://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.

### **Accessibility:**

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 ext. 82147 if you have questions regarding accommodation.

### **Support Services:**

Learning-skills counselors at the Student Development Centre (<http://www.sdc.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counseling.

Additional student-run support services are offered by the USC, <http://westernusc.ca/services>.

The website for Registrarial Services is <http://www.registrar.uwo.ca>.