

Western University  
London, Canada  
Departments of Applied Mathematics and Mathematics, King's University College

## Calculus 1000A – Fall 2016

**INSTRUCTORS: Department of Applied Mathematics:** X. Zou, B. Tudose (course coordinator), G. Reid, A. Buchel, K. Nguyen.

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**King's College:** J. Turnbull

**Course Coordinator:** B. Tudose, Department of Applied Mathematics.

### Basic Course Information

Req. Texts      *Single Variable Calculus: Early Transcendentals* (8<sup>th</sup> edition), by James Stewart (Brooks/Cole)  
*Student's Solutions Manual* for 8<sup>th</sup> edition of Stewart, by Anderson, Cole & Drucker (Brooks/Cole)  
Comes with access to Enhanced Web Assign and electronic "You Book" Access Card

OR

Enhanced Web Assign and electronic "You Book" Access Card

### Optional

*Calculus Fear No More, by Miroslav Lovric (Nelson)*  
*Lecture Notes for Calculus Volume 2* (7<sup>th</sup> edition), by R. N Bryan (Custom Course Materials)  
*Midterm Tests and Final Exams for Calculus 1000A/B*, by R.N. Bryan (Custom Course Materials)

Pre-requisites      Ontario Secondary School MCV4U or Mathematics 0110A/B

Anti-requisites      The former Calculus 1100A/B, Calculus 1500A/B, Applied Mathematics 1413.

Websites      Your instructor will provide the address of the Owl page for your section.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

### Course Syllabus

#### Description

Review of limits and derivatives of exponential, logarithmic and rational functions. Trigonometric functions and their inverses. The derivatives of the trig functions and their inverses. L'Hospital's rules. The definite integral. Fundamental theorem of Calculus. Simple substitution. Applications including areas of regions and volumes of solids of revolution.

## Textbook Chapters

We plan on covering selected topics from Chapters 1-6 of the textbook.

## Expectations

- Students are expected to have read the appropriate sections of Chapters 1-6 and to have completed practice problems assigned by their instructor. Additional reading and practice problems may be assigned.
- Students should note that success in university-level mathematics courses often requires self-directed exploration of topics. Successful students often do more than simply repeat the solutions to assigned problems over and over again and nod along with their instructor in lecture.
- Students are expected to use help resources available to them (especially Help Centre) when problems arise. It is often better to tackle difficult material when problems with understanding occur. Putting off questions until exam time is an ill-advised study strategy. Students that work at a consistent pace throughout the term and make a consistent effort to understand material tend to achieve better results.

## **Evaluation**

Your final grade will be calculated as follows:

<b>Midterm Exam</b>	<b>35 %</b>
<b>Final Exam</b>	<b>50 %</b>
<b>Quizzes</b>	<b>15 %</b>

### Midterm Exam

At the mid term you will write a two-hour exam-style test. This Midterm Exam will take place on **FRIDAY OCT 21, 2016 from 7- 9 pm**. The location will vary depending on your section and surname. Specific details on the tests will be provided by your instructor closer to the exam date. The exam will be closed book, no notes, no calculators or any other electronic devices will be permitted.

Provided you have followed the procedures outlined below (see addenda), and provided you have secured the approval of your dean, you can write a make-up test. Final exam marks may replace midterm marks for those with legitimate reasons for missing make-ups.

### Final Examination

The Final Examination will be three hours and will be cumulative. The exam will be closed book, no notes, no calculators or any other electronic devices will be permitted. The Final Examination will be held during the Final Examination period and will be scheduled by the university. Students seeking a make-up exam for any reason must secure approval from the appropriate dean (see addenda).

### Quizzes/Assignments

Quizzes/Assignments are section-specific and results will be adjusted to ensure fairness among sections. Your instructor will provide you with details relevant to your section.

## **Medical Excuse Requirements**

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)

## **Statement on Academic Offences**

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf).

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

## **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>.

Link to services provided by the University Students' Council:

<http://westernusc.ca/services/>

