

KING'S UNIVERSITY COLLEGE
LONDON CANADA
SCHOOL OF MANAGEMENT, ECONOMICS, AND MATHEMATICS

Mathematics 1230B Section 574
Calculus for the Social Sciences

January - April 2019

INSTRUCTOR Dr. Zinovi Krougly
Email: zkrougly@uwo.ca
Office: SA 057

Course Coordinator Dr. Joseph Turnbull, jturnbu7@uwo.ca, W 233

Times: Tu Th 5:30 PM - 7:30 PM in LH 103

Office Hour: Tu Th 7:30 PM - 8:30 PM in SA 057, or by appointment

TEXTBOOK: Custom package (text and student solutions manual).
Methods of Calculus: University of Western Ontario (ISBN-13: 978-0-17-684216-1)

WHAT IS EXPECTED OF THE STUDENT?

- working knowledge of, and any needed review of, all relevant introductory calculus concepts:
- factoring, expanding (including factoring quadratics, collecting like terms, FOIL, etc)
- using the laws of exponents, including for fractional exponents
- knowledge of trigonometric functions, including their evaluation at special angles
- use of function notation, manipulation of expressions, solving for x
- derivatives, including power, product, quotient, and chain rules
- calculus applied to problems in optimization (finding max and min)
- calculus with radical, rational, exponential, and polynomial functions
- completion of all assigned work.
- assumption of complete responsibility for any classes, tests, or quizzes which are missed.
- it is up to the student to seek out help when needed.

PREREQUISITES: Ontario Secondary School MCV4U or equivalent (High School Calculus), or Mathematics 0110A/B. Note: students who have not also taken a grade 11 and/or grade 12 course in university-preparation functions may be missing some background in trigonometry and possibly other topics. It is the responsibility of the student to seek assistance on such topics in a timely manner.

ANTIREQUISITES: Applied Math 1201A/B, 1413, Calculus 1000A/B, 1500A/B, 1301A/B, 1501A/B, Mathematics 1225B.

COURSE OUTLINE: Review of differential calculus with transcendental functions; methods of integration; constrained and unconstrained multivariable optimization, with applications; mathematical modelling with differential equations, including applications in management, finance, economics, and social science.

EVALUATION OF STUDENT PERFORMANCE:

- Quizzes (10%)
- Test 1 (20%)
- Test 2 (20%)
- Final Exam (40%)
- Flex grade (10%) additional weight applied to your best test or exam

The two Term Tests, each 90 minutes in duration, will be held on

Friday February 8, 2018, from 4:30 - 6:00 PM and

Friday March 15, 2018, from 4:30 - 6:00 PM

Locations of these tests will be announced in class and/or on the course web site. The Final Exam will be 3 hours in length, covering all of the course material. This exam will be scheduled by the Registrar's Office during the April Exam Period.

Several quizzes will be held, at dates to be announced in class.

COURSE WEB SITE:

Various supplemental materials may be posted on the course OWL web site. In addition, there are forums on which students may post questions. Important information will be posted on the NEWS forum and/or on the class page on the web site. All students are expected to be aware of information, and make use of materials, posted on the course web site.

Please contact your course instructor if you require 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 x82147 for any specific question regarding an accommodation.

Notes:

1. **The Tests and Examination will all have some multiple-choice questions and some written answer questions.**

2. **NO printed or written aids (formula sheets, textbooks, notes, etc.) may be used on any test or exam. Any student found using such an aid will receive a grade of zero on that assessment, plus any additional penalties applied by the Dean's Office.**

3. **NO calculators or other electronic devices are allowed on quizzes, tests and exams. Use of any electronic communication device during a quiz, test or exam will result in an automatic grade of zero on that assessment, plus any additional penalties applied by the Dean's Office.**

4. See Absence / Missed Work policy on next page.

5. **Your mark in the course will be the mark that you earn based on your demonstrated understanding of the course content, assessed using the criteria outlined above. Extra credit assignments are not available, and tests and exams cannot be rewritten to obtain a higher mark. There are no exceptions for any reason.**

6. Any email sent to an instructor MUST say **Math 1230B (section 574)** in the subject line, where X is the number corresponding to your section. The email must also be sent from your UWO email account. Any email without this, and/or any email sent from a non-UWO email address, could be blocked by a spam filter or otherwise be deleted unread.

SENATE POLICY ON PREREQUISITES:

Prerequisite checking is the **student's responsibility**. Unless you have the prerequisites for this course or written special permission from the Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision cannot be appealed. You will receive no adjustment to your fees if you are dropped from a course for failing to have the prerequisites.

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

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.

ABSENCE / MISSED WORK:

There are no makeups for missed quizzes.

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 Dean's Office as soon as possible* and contact *your instructor immediately*. It is the student's responsibility to make alternative arrangements with his or her 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 the Dean's Office immediately. For information concerning UWO's Policy on Accommodation for Medical Illness please refer to this policy at:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

SUPPORT SERVICES

Office of the Registrar

UWO

<http://www.registrar.uwo.ca>

King's

<http://www.kings.uwo.ca/academics/academic-deans-office/>

Student Development Services

<http://www.sdc.uwo.ca>

Learning Skills Services

<http://www.sds.uwo.ca/learning>

USC

<http://westernusc.ca/services>

Student Development Services

<http://www.sdc.uwo.ca>

Academic Calendar

<http://www.westerncalendar.uwo.ca>

ITS

<http://uwo.ca/its/helpdesk>