

Western University Department of Mathematics

Calculus 1500A/B - Calculus I for the Mathematical Sciences

September-December 2018

INSTRUCTOR: [Gord Sinnamon](#)

TEXTBOOK: *Single Variable Calculus: Early Transcendentals, Eighth Edition*, by James Stewart, published by Nelson. It is available from the Bookstore in a bundle but only the text is required.

PREREQUISITES: Ontario Secondary School MCV4U or Mathematics 0110A/B.

ANTIREQUISITES: Calculus 1000A/B, the former 1100A/B, Applied Mathematics 1413.

COURSE OUTLINE: An enriched version of Calculus 1000A/B. Basic set theory and an introduction to mathematical rigour. The precise definition of limit. Derivatives of exponential, logarithmic, rational trigonometric functions. L'Hospital's rule. The definite integral. Fundamental theorem of Calculus. Integration by substitution. Applications.

WHAT IS EXPECTED OF THE STUDENT: Students are expected to attend all lectures and complete all tests, assignments, and examinations. No aids are permitted in tests and examinations. Regular homework is an essential part of the course; it is the student's responsibility to keep up with the assigned homework and to seek additional help if and when it is needed.

EVALUATION OF STUDENT PERFORMANCE: Tests & Assignments - 60%; Final Examination - 40%. No calculators or other electronic devices or any other aids are allowed on tests and exams.

SENATE POLICY ON PREREQUISITES: 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.

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](#). 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 OR MISSED WORK: If you are unable to meet a course requirement due to illness consult the [Policy on Accommodation for Medical Illness - Undergraduate](#). If you are unable to meet a course requirement due to other serious circumstances, contact your instructor immediately.

SUPPORT SERVICES: Registrars: [Main Campus](#), [Brescia](#), [Huron](#), [King's](#); [Student Development Centre](#); [University Students' Council](#); [Academic Calendar](#); [Information Technology Services \(ITS\)](#). Students who are in emotional/mental distress should refer to [Mental Health Western](#) for a complete list of options about how to obtain help.