

INTERMEDIATE CALCULUS I 2302A (FALL 2017)

Instructor.

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Class. MWF 1:30–2:30pm, SH 2355

Office Hour. TBA

Textbook. J. Stewart, Multivariable calculus, 8th ed., Brooks/Cole
The book is available at the bookstore.

Prerequisites. A minimum mark of 55% in Calculus 1501A/B or Calculus 1301A/B, or Applied Mathematics 1413

Unless you have either the requisites for this course or written special permission from your Dean to enrol 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.

Antirequisites. Calculus 2502A/B

Course Description. We will extend differential calculus from the single variable to the multivariable case. This requires some linear algebra. As this is not a prerequisite for this course, we will start by studying basic notions from linear algebra. Roughly speaking, we will cover Chapters 12–14 from the textbook, maybe more if time permits.

This course and Calculus 2502 are very similar. The key difference is that in Calculus 2502 students are assumed to have prior knowledge of linear algebra (Mathematics 1600). In the present course we will spend approximately the first month on linear algebra (Chapter 12 of the book). If you know this material already, you will be better off taking Calculus 2502.

Syllabus. Three dimensional analytic geometry: dot and cross product; equations for lines and planes; quadric surfaces; vector functions and space curves; arc length; curvature; velocity; acceleration. Differential calculus of functions of several variables: level curves and surfaces; limits; continuity; partial derivatives; tangent planes; differentials; chain rule; implicit functions; extrema; Lagrange multipliers.

Evaluation of Student Performance.

Midterm Examination. Thu Oct 26, 7:00–9:00pm, SH 2316; worth 30% of the final grade.

Final Examination. The final exam (3h) is worth 50% of the final grade. Date and place TBA.

Quizzes. 20% of the final grade. There will be one or two quizzes per fortnight. Dates TBA.

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.

No electronic devices are not allowed during exams.

Make-up exams and conflicts.

For the midterm exam. In the event that you must miss one of the midterms due to a valid conflict, the make-up exam will be given before the regular exam. Usually this will be earlier on the same day, or on the day before. If you are in this situation, you must let us know at least two weeks before the exam date.

If you miss the midterm due to illness, you must present a doctor's note to the appropriate Dean's office, and you may be given a make-up exam as soon as possible after the regular exam, or have the weight of the midterm transferred to the final exam. If you are in this situation, you should contact your instructor as soon as you realize that you will miss the exam.

For the final exam. If you have a conflict with another final exam, you must contact Rob Downes in the Registrar's office by mid November to arrange a special time/place to write the final.

If you have a conflict with a midterm for a year-long course, you must contact the instructor of the other course.

If you have three final exams in 3 consecutive periods, you must contact the Dean of your faculty.

In all case, please let your instructor know.

If we need to give you a make-up exam, it will be given before the regular exam. If you miss an exam due to illness, you must present a doctor's note to the appropriate Dean's office, and you will be given a make-up exam as soon as possible after the regular exam. If you are in this situation, you should contact your instructor as soon as you realize that you will miss the exam.

Failure to follow these rules may result in a grade of zero.

See also the University's policy on final exam conflicts.

Statement on services for students in emotional/mental health distress. 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 Statement. Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 ext. 82147 for any specific question regarding an accommodation.