math222

calculus III

course outline, summer 2025

instructor	Alexis Leroux-Lapierre
office	burnside 1033
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office hours	on request (zoom or in-person)
course website	`math.mcgill.ca/alapierre/math222_s25`

Most of the communication will happen by email or through the course website. Make sure to check it weekly for updates!

overview

The official course content from the math department is the following:

> "Taylor series, Taylor's theorem in one and several variables. Review of vector geometry. Partial differentiation, directional derivative. Extreme of functions of 2 or 3 variables. Parametric curves and arc length. Polar and spherical coordinates. Multiple integrals."

We will not necessarily proceed in the previous order when presenting topics.

schedule

when	mtwr 11:00-13:30
where	rutherford physics building, room 112

evaluations

There will be three quizzes (1h each), one midterm (2h30m) and one final exam (3h). Their weights will be distributed as follow :

quizzes (3)	4% each
midterm	33%
final exam	55%

Note that quizzes will not be graded and students attempting automatically get full marks.

references

The main reference throughout the course will be

Multivariable Calculus, Ninth Edition, by J. Stewart (with D. K. Clegg and S. Watson).

Print and online versions are available. Note that *Multivariable Calculus* consists of chapters 10–17 of Stewart's full *Calculus* text. If you already have the latter, that is sufficient. Earlier editions of the text are also fine. The textbook is strongly recommended.

calendar

key academic dates

classes begin	may 1
withdrawal with refund	may 7
withdrawal without refund	may 15
fête des patriotes (holiday)	may 19
classes end	may 29
study days	may 30, june 2

evaluations

quizzes	may 8, 22,29
midterm	may 15
final	june 3 or 4

policies

accommodations

Legally mandated academic accommodations are handled by Student Accessibility and Achievement. More information is available at "`https://www.mcgill.ca/access-achieve/`".

academic integrity

"McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures."

« L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires. »

language of submission

"In accord with McGill University's Charter of Student Rights, students in this course have the right to submit in English or in French any written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives."

« Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté, sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue. »