

math228

classical geometry

course outline, fall 2021

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office	burnside 1033
course website	math.mcgill.ca/~alapierre/math228/home
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office hours	on request (zoom or in-person)

Most of the communication will happen by email or through the course website. Make sure to check it weekly for updates! No material/textbook is needed for the course. A ruler and compass set is optional.

schedule

As of today, the course is scheduled to be in-person. This is subject to change according to McGill's politics which follow closely the epidemiological situation. The schedule is the following :

course schedule	mwf 10 :35 - 11 :25
room	Trottier 2120

Note that the course will not be recorded. At any time, the course could switch to an online format if it is impossible to meet on campus.

overview

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

"This course is designed to reintroduce classical Euclidean geometry to tomorrow's teachers. Topics include : Axioms and Euclid's Elements, the triangle theorem, the Pythagorean Theorem and its extensions, basic constructions and similar triangles, Thales' theorems and cyclic quadrilaterals, the centers of triangles, the nine-point circle, conic sections and analytic geometry, the prismatoid formula, the Platonic solids, non-Euclidean geometries."

evaluations

During the course, there will be 5 quizzes, 1 midterm (divided into two 1 hour evaluation), 1 final and 1 oral exam. The detailed schedule is given below. Weights will be given according to the following table :

quizzes (5)	3% each
midterm	25%
oral exam	20%
final exam	40%

If one happens to miss a quiz, the corresponding weight will be put on the final exam.

calendar

key academic dates

classes begin	sep 1
withdrawal with refund	sep 21
withdrawal without refund	oct 26
classes end	dec 6

evaluations

quizzes	sep 20, oct 4, nov 1, 15, 29
midterm	oct 18, 20
oral exam	on appointment
final	tbd

references

The following textbooks will be used to build the class. The books [CG67] and [Har13] will be our main references.

[CG67] Harold Scott Macdonald Coxeter and Samuel L Greitzer. *Geometry revisited*, volume 19. Maa, 1967.

[Eve72] Howard Eves. *A survey of geometry*. Allyn & Bacon, 1972.

[Eve97] Howard Eves. *Foundations and fundamental concepts of mathematics*. Courier Corporation, 1997.

[Fit07] Richard Fitzpatrick. *Euclid's elements of geometry*. Euclidis Elementa, 2007.

[Har13] Robin Hartshorne. *Geometry : Euclid and beyond*. Springer Science & Business Media, 2013.

[Hea56] Thomas Little Heath. *The thirteen books of Euclid's Elements*. Courier Corporation, 1956.

policies

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. »

covid-19 regulations and accomodations

As of today, McGill asks students to wear a mask at all time, even when sitting down. If you are diagnosed with covid-19 and it impacts your ability to take exams, you are asked to contact the Dean of Students for formal procedures. You can also contact me as I will try my best to be lenient.