



MATH 494 (MAST 699/MAST 833), Sec. CC (Fall 2026) Topics in Algebra & Number Theory: Elliptic Curves

Instructor:	Dr. C. Pagano
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Office Hours:	_____
Important:	Students should get the above information from their instructor and from the course Moodle site. The instructor is the person to contact should there be any questions about the course.
Class Schedule:	Wednesdays, 17:45-20:15.

Reading Week

Begins on Saturday, October 10 and ends on Friday, October 16, 2026. No classes that week.

Textbook

Notes will be provided throughout the course. The basic background reference is <https://link.springer.com/book/10.1007/978-0-387-09494-6>

NOTE: Students should order textbooks as early as possible, especially for print versions in case books are back ordered or there are any shipping delays.

The textbook will be available at the library.

Topics

The main goal of this course is to explore the (arithmetic) theory of elliptic curves. We will cover the basic background of elliptic curves over local fields first, before moving towards the study of their arithmetic over global fields.

Evaluation

30% Assignments, 70% Final presentation.

If the grading scheme for this course includes graded assignments, a reasonable and representative subset of each assignment may be graded. Students will not be told in advance which subset of the assigned problems will be marked and should therefore attempt all assigned problems.

Student Services

You may wish to access the many services available to you as a Concordia student. An overview of these resources can be found here: <https://www.concordia.ca/students/services.html>

Academic Integrity and the Academic Code of Conduct

This course is governed by Concordia University's policies on Academic Integrity and the Academic Code of Conduct as set forth in the Undergraduate Calendar and the Graduate Calendar. Students are expected to familiarize themselves with these policies and conduct themselves accordingly. "Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: <https://www.concordia.ca/conduct/academic-integrity.html>" [*Undergraduate Calendar, Sec 17.10.2*]

Behaviour

All individuals participating in courses are expected to be professional and constructive throughout the course, including in their communications.

Concordia students are subject to the [Code of Rights and Responsibilities](#) which applies both when students are physically and virtually engaged in any University activity, including classes, seminars, meetings, etc. Students engaged in university activities must respect this Code when engaging with any members of the Concordia community, including faculty, staff, and students, whether such interactions are verbal or in writing, face to face or online/virtual. Failing to comply with the Code may result in charges and sanctions, as outlined in the Code.

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Use of Concordia email

Your [Concordia email](#) is the official channel for all university communications, as required by the university's [Policy on Concordia email accounts for students and employees](#). Please use your Concordia email for all communication related to this course and check it regularly so you don't miss important information. [Learn more about how to access your Concordia email.](#)

As a student, you are expected to follow the email policy and to use your Concordia email in a respectful and responsible manner. The policy helps ensure that communication across the university is secure, reliable, and consistent.

Extraordinary circumstances

In the event of extraordinary circumstances and pursuant to the [Academic Regulations](#) the University may modify the delivery, content, structure, forum, location and/or evaluation scheme. In the event of such extraordinary circumstances, students will be informed of the change.