

MAST 699 (MAST 833), Sec. G
Topics in Algebra – Algebraic Geometry
Fall 2023

Instructor: Dr. A. Iovita, Office: LB 927-5, Phone: (514) 848-2424, Ext. 3265
Email: adrian.iovita@concordia.ca

Office Hours: By appointment.

Class Schedule: Tuesdays and Fridays, 9:00-11:00 AM. The term will be 12 weeks in length, with the midterm break from Tuesday, October 10th to Sunday, October 15th. Monday, October 9th, the university will be closed due to Thanksgiving Day.

Textbook: No textbook.

Topics: The course will develop the main theme of schemes, following chapter II of Hartshorne's book Algebraic Geometry. We will study sheaves on a topological space, affine schemes (we attach to any commutative ring with identity a pair consisting of a topological space and a sheaf of rings on it, called affine scheme) and finally schemes, which are pairs consisting of a topological space and a sheaf of rings on it which locally are isomorphic to an affine scheme. We'll study the properties of schemes and many examples.

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.

Intellectual Property

Content belonging to instructors shared in online courses, including, but not limited to, online lectures, course notes, and video recordings of classes remain the intellectual property of the faculty member. It may not be distributed, published or broadcast, in whole or in part, without the express permission of the faculty member. Students are also forbidden to use their own means of recording any elements of an online class or lecture without express permission of the instructor. Any unauthorized sharing of course content may constitute a breach of the [Academic Code of Conduct](#) and/or the [Code of Rights and Responsibilities](#). As specified in the [Policy on Intellectual Property](#), the University does not claim any ownership of or interest in any student IP. All university members retain copyright over their work.

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.