Syllabus for MATH 2360 Section 001
Geometry

Term:	Spring 2026	**Instructor:**	Michael Biro
Time:	TuTh 3:30 PM – 4:45 PM	**E-mail:**	michael.biro@uconn.edu
Room:	MONT 112	**Office:**	MONT 403
Website:	`learn.uconn.edu`	**Hours:**	TuTh 11am-12pm and 2-3pm

Text: *Foundations of Geometry*, by Venema.

Description: A fresh look at geometry, old and new. Euclidean and non-Euclidean geometries are examined from from different perspectives. Topics may include symmetries, the role of the parallel postulate and some topics from 19th and 20th century geometry, e.g., fractals and knots.

Exams: There will be 3 exams and a cumulative final. The midterm dates are tentatively set for 2/19, 3/26, and 4/23 respectively, while the final will be scheduled by the registrar.

Quizzes: There will be open-notes quizzes completed in class approximately weekly.

Homework: There will be homework assigned and collected GradeScope approximately weekly. Collaboration is permitted, but your write-up must be done on your own. Your lowest homework score will be dropped. **Looking up solutions online is not permitted, and submissions that use techniques not covered in class will receive no credit.**

Grading: Based on the homework, the exams, and the final. The weights will be approximately:

- Participation: 10%
- Homework: 10%
- Quizzes: 15%
- Exam 1: 15%
- Exam 2: 15%
- Exam 3: 15%
- Final Exam (Cumulative): 20%

Course Outline: We will cover the material in approximately this order/timeline, as time permits:

- Introduction and Classical Geometry (Ch 1 and Euclid's Elements, approx. 2 weeks)
- Modernizing Euclid and Axiomatizing Geometry (Ch 2, approx. 2 week)
- Foundations of Modern Geometry (Ch 3, approx. 2 weeks)
- Neutral Geometry (Ch 4, approx. 2 weeks)
- Modern Euclidean Geometry (Ch 5, approx. 2 weeks)
- Hyperbolic Geometry (Ch 6, approx. 2 weeks)
- Spherical Geometry (approx. 2 weeks)

Resources: The following resources offer tutoring, support, and accommodations for students, as well as a reference for syllabus policies and statements:

- The Q center `https://qcenter.uconn.edu`
- The Dean of Students `https://dos.uconn.edu`
- The Center for Students with Disabilities `https://csd.uconn.edu`
- Euclid's Elements is available, with commentary, at `https://mathcs.clarku.edu/~djoyce/java/elements/elements.html`
- Syllabus Policies `https://provost.uconn.edu/faculty-and-staff-resources/syllabi-references/`

MATH 2360Q Schedule			
Dates	Week	Sections	Topic
01/19/2026 - 01/23/2026	1	Euclid’s Elements, Chapter 1	Euclid
01/26/2026 - 01/30/2026	2	Euclid’s Elements	Euclid
02/02/2026 - 02/06/2026	3	Chapter 2	Axiomatic Systems and Proofs
02/09/2026 - 02/13/2026	4	Chapter 2	Incidence Geometry
02/19/26	Exam 1		Euclid’s Elements, Chapters 1, 2
02/16/2026 - 02/20/2026	5	Chapter 3	Neutral Plane Geometry
02/23/2026 - 02/27/2026	6	Chapter 3	Neutral Plane Geometry
03/02/2026 - 03/06/2026	7	Chapter 4	Theorems of Neutral Geometry
03/09/2026 - 03/13/2026	8	Chapter 4	Theorems of Neutral Geometry
03/16/2026 - 03/20/2026	9	Spring Recess	
03/26/26	Exam 2		Chapters 3, 4
03/23/2026 - 03/27/2026	10	Chapter 5	Axiomatic Euclidean Geometry
03/30/2026 - 04/03/2026	11	Chapter 5	Axiomatic Euclidean Geometry
04/06/2026 - 04/10/2026	12	Chapter 6	Hyperbolic Geometry
04/13/2026 - 04/17/2026	13	Chapter 6	Hyperbolic Geometry
04/23/26	Exam 3		Chapters 5, 6
04/20/2026 - 04/24/2026	14	-	Spherical Geometry
04/27/2026 - 05/01/2026	15	-	Spherical Geometry
TBD	Final Exam		Cumulative