

MATH 350 – Spring 2013

Geometry

Instructor: Jack Calcut
Office: King 220A
Email: jcalcut@oberlin.edu
Office Phone: (440) 775-8008

Class: MWF 10–10:50 in King 227
Office Hours: M 11–12, T 10–11, F 11–12,
or by appointment.

Course Description

This course takes a modern approach to geometry based on group theory and the Erlangen Programm making possible the survey of a wide spectrum of geometries, Euclidean and non-Euclidean. The discovery of these geometries in the 19th century caused a scientific and philosophical revolution second only to the Copernican revolution. Aspects of axiomatic geometry will be studied, including a proof of the PL Jordan curve theorem in neutral geometry. Other topics will be studied as time permits.

Prerequisites

MATH 220 (Discrete Mathematics).

Textbooks (required)

Geometry, 2nd edition, Brannan, Esplen, and Gray, Cambridge University Press, 2012, 602 pages.

Grading

Grades will be given based on the following scale and your overall percentage in the course.

Letter	A	A-	B+	B	B-	C+	C	C-	D	F	W
Point	4.00	3.67	3.33	3.00	2.67	2.33	2.00	1.67	1.0	0.0	0.0
%	[93, 100]	[90, 93)	[87, 90)	[83, 87)	[80, 83)	[77, 80)	[73, 77)	[70, 73)	[60, 70)	[0, 60)	

If the course is taken Pass/No Pass, then $\geq C-$ is considered passing and is given the grade Pass (P); work $< C-$ is considered not passing and is given the grade No Pass (NP).

- 40% Homework** Homework will be assigned approximately weekly on Blackboard. Homework must be written up neatly with multiple pages stapled. Students are encouraged to work together to learn the material, but each student must independently write up his/her own solutions. Homework is a major part of the course. No late homework will be accepted.
- 30% Midterm Exam** Friday, March 15 in class. No electronic devices, notes, or books are allowed on exams.
- 30% Final Exam** Wednesday, May 15, 7–9 p.m. No electronic devices, notes, or books are allowed on exams.

Disabilities

The college will make reasonable accommodations for persons with documented disabilities. Students should notify the Office of Disability Services located in Peters G-27/G-28 and their instructor of any disability related needs within the first two weeks of class.

Honor Code

The College requires that students sign an Honor Code for all assignments. This pledge (which is written out on each assignment) states: "I affirm that I have adhered to the Honor Code in this assignment." For further information, see the student Honor Code, which you can access via Blackboard>Lookup/Directories>Honor Code.

Important Dates

- First day of classes: Monday, February 4.
- Add/drop deadline: Wednesday, February 13.
- Midterm Exam: Friday, March 15 in class.
- Distinguished visitor (William Goldman): March 20 – March 22.
- Goldman's public lecture (required): Wednesday, March 20, 7:30–8:30 p.m. in King 306.
- Spring recess: Saturday, March 23 – Sunday, March 31.
- Midterm grades available via PRESTO: Thursday, April 4.
- Last day to declare P/NP or to withdraw: Monday, April 8.
- Last day of classes: Saturday, May 11 (at Noon).
- Final Exam: Wednesday, May 15, 7–9 p.m.