



# MTH 333

## Geometry

### Fall 2018

## Course information

**Room:** MC 134

**Time:** Tuesday, Thursday 8:30 - 9:45

**Credits:** 3.0

**Prerequisites:** A grade of C or better in MTH 284 or MTH 288

**Description:** This course is an introduction to geometry. The main focus is on two-dimensional Euclidean geometry from an axiomatic perspective. Topics covered include congruence, parallelism, area, similarity, geometric constructions, and non-Euclidean geometries.

**Learning outcomes:** Successful MTH 333 students will:

- develop an understanding of basic geometric results and constructions;
- become familiar with logical reasoning and proofs;
- learn to effectively communicate mathematical ideas and arguments, especially in the context of geometry.

**Online resources:** Visit Blackboard for up-to-date information about this course.

## Instructor

**Name:** Federico Galetto

**E-mail:** [f.galetto@csuohio.edu](mailto:f.galetto@csuohio.edu)

**Phone:** 216-687-4696

**Office:** Rhodes Tower 1528

**Office hours:** Tuesday 14:00 - 15:30, Thursday 10:00 - 11:30, or by appointment

## Materials

### Recommended textbook:

- Gerard A. Venema, *Foundations of geometry*, Second Edition, Pearson, 9780136020585

### Suggested reading:

- John Stillwell, *The four pillars of geometry*, Springer, 9780387255309
- David Joyce, *Euclid's Elements*, <https://mathcs.clarku.edu/~djoyce/java/elements/elements.html>
- John Poole, *Euclid's Elements*, <http://math.furman.edu/~jpoole/euclidselements/euclid.htm>

## Grading

**Grade calculation:** Homework and exam grades will be posted on Blackboard. Your percentage grade will be computed according to the following breakdown and converted to a letter grade as indicated below.

|      |              |    |          |    |         |
|------|--------------|----|----------|----|---------|
| 30%  | Homework     | A  | 93%-100% | C+ | 76%-79% |
| 30%  | Midterm exam | A- | 90%-92%  | C  | 70%-75% |
| 40%  | Final exam   | B+ | 87%-89%  | D  | 60%-69% |
| 100% | Total        | B  | 83%-86%  | F  | 0%-59%  |
|      |              | B- | 80%-82%  |    |         |

**Homework:** There will be 6 or 7 homework assignments, and the lowest assignment grade will be dropped. Due dates will be announced in class and on Blackboard. You are expected to work independently on and submit a paper copy of all assignments by the due date. **Late assignments and electronic submissions will not be accepted.** Clearly indicate your name and student number on all assignments. Ensure your writing is legible and clearly organized, and that all assignment pages are securely stapled together (failure to comply may result in a lower grade).

**Midterm exam:** A midterm exam will be held in class on Thursday, October 18, 2018 (tentative date). Topics will be announced in class. You are required to bring student identification.

**Final exam:** The final exam will be held on Thursday, December 13, 2018, 8:00 - 10:00. Location will be announced. You are required to bring student identification.

**Grade appeal:** You are responsible for checking corrections on assignments and tests, and for ensuring grades are reported correctly on Blackboard. Any appeal request must be submitted within one week after the assignment/test is returned.

## Policies

**Attendance and participation:** You are expected to attend all classes. If you are unable to attend a class, it is your responsibility to notify your instructor in advance and to inquire about any topics covered and announcements made during that class. It is your responsibility to actively engage in each class. Participation may be considered as a positive factor towards your grade.

**Electronic devices:** The use of electronic devices such as (but not limited to) phones, smartwatches, computers, tablets, and headphones is prohibited during class, unless otherwise indicated. If you wish to use an electronic device for note taking, you need to receive explicit consent from your instructor and you may occasionally be asked to submit a sample of your notes.

**Extra credit and makeups:** There is no extra credit in this class. Makeup exams may only be given in case of university sanctioned activities (such as conferences, competitions, etc.) or in case of medical conditions. To be eligible for a makeup exam you must present sufficient documentation, such as an invitation to attend an event or a doctor's note indicating you cannot take the exam on the scheduled date. With the exception of unforeseen medical emergencies, all makeup exams must be arranged in advance.

**Academic integrity:** Cheating and/or plagiarism will not be tolerated. Cheating includes copying or receiving help from another student on quizzes, tests or exams, as well as allowing another student to copy from your work. Receiving help from someone else by using an electronic device such as a mobile phone or a smartwatch constitutes cheating. Copying another student's homework, or allowing someone else to do your homework for you, is also considered cheating. If cheating occurs in a quiz or test, the student will receive a grade of 0 for that component of the course. If a student cheats a second time during the course, the student will receive an F for the course. If cheating occurs on the final exam, the student will receive a grade of F in the course. Any cheating activity may be reported for further action. Information regarding the official CSU Policy on Academic Misconduct can be found at [https://www.csuohio.edu/sites/default/files/3344-21-02\\_0.pdf](https://www.csuohio.edu/sites/default/files/3344-21-02_0.pdf).

**Accommodations:** Educational access is the provision of classroom accommodations, auxiliary aids and services to ensure equal educational opportunities for all students regardless of their disability. Students who feel they may need an accommodation based on the impact of a disability should contact the Office of Disability Services at 216-687-2015. The Office is located in MC 147. Accommodations need to be requested in advance and will not be granted retroactively.

**Course modifications:** The instructor retains the right to modify the contents of the course, including grading criteria and course policies. Reasonable notice will be given for all time sensitive matters. Course changes will be communicated in class and on Blackboard.