

# MATH 402 - NON-EUCLIDEAN GEOMETRY, SPRING 2021, SYLLABUS

## PERSONNEL

**Instructor:** Eric Samperton. You can call me Professor Samperton, Professor Eric, or just Eric. Whatever you're most comfortable with.

Pronouns: he/him, they/them, or other gender neutral options, whatever you prefer.

Email: my last name without any vowels @illinois.edu

Phone: 910-922-6414

Personal webpage: <https://smprtn.pages.math.illinois.edu>

The course has a grader, but you should never need to interact with them.

## WEBPAGES, RESOURCES AND SOFTWARE

Stable access to all of the following webpages is expected of all students in the course:

### Moodle:

<https://learn.illinois.edu/course/view.php?id=55294>

All course resources will be hosted or linked to from Moodle.

### Campuswire feed:

<https://campuswire.com/c/G6235F233/feed>

Assuming you didn't register for the course recently, you should have already received a Campuswire registration email. If not, please email me and I will send you one.

### Media Space channel:

<https://mediaspace.illinois.edu/channel/MATH+402+Non-Euclidean+Geometry+%28SP21%29/196861813>

The channel is set to the most restrictive "Private" setting, meaning that in order to view or contribute videos (a requirement for this class), you must be a member of the channel. If you are not already a member, please email me and I will add you.

### Permanent Zoom coordinates:

<https://illinois.zoom.us/j/86564360887?pwd=UmdDVi9LNUI4Q05nWVlrdG1ac21MZZ09>

Meeting ID: 865 6436 0887

Password: available on Moodle

**Textbook:** Hvidsten's *Exploring Geometry*. Do not buy it, because a copy is available on Moodle. Please download it to your preferred electronic device.

**Software:** *GeometryExplorer*, a software for visualizing constructions in both Euclidean and non-Euclidean plane geometries. Available on Moodle. It requires 128MB of RAM to run, and runs on Windows, Mac, and Linux. If you don't have a computer capable of running it, please let me know.

## ORGANIZATION

**Meetings:** Office hours or tea time will happen regularly during our registrar-provided meeting times:

- **Office hours:** Mondays and Fridays 2:00-2:50PM, at the above Zoom coordinates
- **Tea time:** Wednesdays 2:00-2:50PM, at the above Zoom coordinates

Regular attendance at office hours is **strongly encouraged if possible**, but not required. **Occasional attendance at tea time is required** (see "Curiosity" below). None of these meetings will be recorded.

**Communication plan:** My email or phone should only be used when other methods fail. The preferred way is via Campuswire. You can DM me there if you have personal questions or concerns. All math questions should be asked in the class feed forum. You have the option to make those posts anonymous to

your classmates (but not to me). If you want to contact me both privately and anonymously, there is an anonymous feedback form on Moodle. I will always try to respond to DMs and emails within 24 hours on weekdays, although on weekends I may wait until Monday.

**Schedule:** Most important things in the class will generally happen on Wednesdays. Homework and exams will be due on Wednesday at noon (except for break days, when they will be due on Thursday), and weekly videos, homework and course notes I create will be uploaded to Moodle by the end of the day Wednesday.

### GRADING

**Curiosity:** Talk with me at tea time on at least two different weeks (other than the first week of class), at least once before Midterm 2 and once after Midterm 2. You get 1% for each visit. Of course, you really have to engage with me to earn the point, not just show up. If you don't know what to do, try asking me a mathy question that isn't directly related to the reading or homework, or show me something cool (e.g. math-related website or theorem or something). Think outside the box.

CATEGORY	WEIGHT
Curiosity	2%
Community	3% + 1%EC*
Creativity	4%
Participation	5%
Homework	30%
Midterm 1	9%
Midterm 1	9%
Midterm 1	9%
Final	28%

**Community:** I am gamifying your participation on Campuswire by enabling the class reputation feature. If you break out of Noob into Starter, you'll get 1%. If you achieve Intermediate or Advanced, you'll get 3%. The top two students with the highest reputation score at the end of the semester will get an additional 1% extra credit towards their final course grade. See details on Campuswire. Students who troll use dishonest methods to boost their reputation (see Netiquette paragraph below) will have their community score set to 0%.

**Creativity:** Create 2 problem-solving videos, one before Midterm 2, and one after Midterm 2. You will post your video to the Media Space channel. Each is worth up to 2 points. I will post a list of problems to Campuswire on Wednesday afternoons. Students can lay claim to them in the comments section.

**Participation:** Except during midterm weeks, I will organize weekly Campuswire chat threads around topics related to that week's reading and homework. You should participate in at least 5 of them, and in at least one between/before every exam. You get 1 point for each qualifying participation. To earn the point, you need to engage in a way that appears to me to be meaningful and in good faith.

**Homework:** Homework will be submitted by upload on Moodle, and grades and feedback will be returned via Moodle. It will typically be due on Wednesdays at noon Urbana time, with a free buffer window until 11:59PM the same day. (Effectively, this means it's due at 11:59, but I will refuse to help you with it after noon.) Homework can be submitted late up until noon on the Sunday after it is due, with a penalty of 20% of the total possible points subtracted for each day it is late (80% Thursday, 60% Friday, . . . , 0% Monday). I will drop your two lowest scores.

**Exams:** There will be three midterms and one final. For now, the plan is for them all to be untimed, open book, open notes, open class resources, but closed everything else. I won't be using proctoring services or anything creepy like that. But this means you, by taking this class, agree not to cheat. Midterms will replace homework for their weeks. I will announce due dates on Campuswire at the beginning of the semester.

**Letter grades.** Your final course letter grade will be determined by applying a curve to the raw scores computed via the above grading breakdown. The curve will be at least as generous as the usual 10 point scale.

## ETHICS

**Privacy:** I'm a strong believer in student privacy. Please don't share details of health or personal issues with me that you are uncomfortable sharing. Also, you do not have to show your face on Zoom or in your problem solving videos if you don't want. Campuswire and Moodle are both FERPA compliant, and the private chats on Campuswire you can create with your fellow classmates are completely inaccessible to me. Of course, as a general warning, you must trust the other person you're chatting with not to share your messages, so be vigilant and assume that anything you say could be made public.

**Cheating:** Generally speaking, this class will be very generous with allowable resources. When completing the homework, you may use any library book, or any generally and freely available reading material from the internet you please, so long as you avoid plagiarizing by properly attributing your sources. By "generally and freely available" I mean easily found on the internet or in a library for free. However, so-called homework help services (e.g. Chegg, CourseHero, your "tutor" who just does your homework for you, *etc.*) are completely off limits for all homework assignments, bounty projects, and exams. If anyone is found to have cheated (especially via one of the corporate cheating companies), I will work as hard as possible to ensure that I can find a fair reason to give that person an F for as many assignments as possible, and, hopefully, failing them for the class. Please see Article 1 Part 4 of the student code.

**Copyright.** Any course materials (notes, problem sets, videos, etc) I prepare belong to me, and likewise for things prepared by your classmates (unless they say otherwise). Do not share them with people or companies outside our class. In particular, if someone uploads my homework sets or exams to a homework help service, not only will they have violated the student conduct policy regarding cheating, but they will also be violating my copyright, which is both a separate conduct violation and illegal. In such a scenario, I will pursue sanctions for both cheating and copyright violations.

**Netiquette.** Be kind. Don't troll. We're all still adapting to new ways. Please don't hog my attention in office hours, and please actively try to engage with your fellow classmates. If you absolutely must say mean things to me, I recommend using the anonymous feedback form.

## REASONABLE ACCOMMODATIONS AND EQUITY OF ACCESS

The sooner you submit any requests for reasonable accommodations through DRES, the sooner I can ensure you have what you need to succeed. This class will be highly visual, and largely happen on computers. Some of you may have reasonable requests related to things that aren't normally handled via DRES (e.g. colorblindness, an unstable internet connection, a complicated home life). Please let me know about such things.

## GET OUT CLAUSE

If you were unaware, there's a worldwide pandemic going. Things might have to change. I promise not to be capricious about it.