

# Math 582b

Winter 2016 MATH 582 B, SLN 17028 SPECIAL TOPICS

Meets MWF 1:30-2:20 in LOW 220.

## Notes

Public folder: <https://cloud.sagemath.com/projects/b85dd1b3-3f5f-4c2d-b503-242612561b9e/files/notes/>

## Mailing list

Website: <https://groups.google.com/d/forum/math582b-uw>

Email: [math582b-uw@googlegroups.com](mailto:math582b-uw@googlegroups.com)

I added all your UW emails. If you want me to add another account, let me know. I made everybody managers, so anybody can add other people. The mailing list is not public.

## SageMathCloud

You should all have SMC projects with the title “Your Name - math582”, which will have materials associated to the course. I moved all these projects to members-only servers, increased the idle timeout to 48 hours, and enabled network access.

## Topics

### Software

- How to use Sage, Pari, and Magma. These are the only serious interactive programs for computational number theory at present. I’ll focus mainly on Sage, but also talk about Pari and Magma, and some of what they are uniquely good at. Exercises will force you to get experience.

**Number fields**

**Elliptic curves**

**Exact linear algebra**

**Modular forms**

**Grades**

This is an advanced topics grad course. You will get a 4.0 unless you are blatantly lazy or annoying, in which case we will have a talk. There will be homework, which I'll provide some feedback about, but will mainly make you work.