

Exploring Math through Programming

Math 205, Fall 2021

Meetings: MW 2:00–2:50, 106 Friendly Hall
Instructor: Nick Addington
Office: 208 Fenton Hall
E-mail: adding@uoregon.edu
Office Hours: Fridays 2:00–3:00, and by appointment.
TA: Corey Brooke
Office: 312 Fenton Hall
E-mail: cbrooke@uoregon.edu
Office Hours: Mondays 11:00-1:00 and Fridays 12:00-2:00 in Fenton Hall 3rd floor atrium.
Web Page: <http://pages.uoregon.edu/adding/courses/205/>

Grading is pass/no pass, with a passing grade of 85%, based on the following:

- **Weekly homework (50%).** Work on it with a partner in class, submit it through Canvas on Fridays.
- **Engagement (25%).** Use class time to work with your partner on the worksheet, or if you need to miss class, have a look at the day's worksheet on Canvas and email us one or more questions. *Please do not come to class if you feel sick.*
- **Final project (25%).** Choose a topic from course that you'd like to pursue further and in more depth, or a related topic that you'd like to explore. Topic due Wednesday, November 10; outline due Wednesday, November 17; draft due Wednesday, December 1; finish project due Wednesday, December 8.

This is a 2-credit course, so you should expect to spend 4 hours a week outside of class.

Learning outcomes. The goal of the MathLabs is to help students make the transition from the kind of “procedure-driven” mathematics that they see in K-12 education (and that to some extent continues in lower-division college courses) to the more creative engagement with mathematics that is required for upper-division math courses. Students will develop basic skills in Python or another programming language, with a view toward exploring mathematical problems. They will get experience trying examples, looking for patterns, and making, testing, and modifying conjectures, and explaining their mathematical reasoning to others through writing.