MATH 6678 - Graphs & Algorithms - Spring '26

Instructor: Puck Rombach (*puck.rombach@uvm.edu*)

Overview
The course will cover topics in graph algorithms, such as basic algorithms, computational complexity and graph classifications.

Reading is required in advance of each class, and a large part of the class time will be devoted to discussion and active learning. We will use various textbooks and other sources, as well as journal papers.

Homework
The class notes contain exercises, some of which we will work on collaboratively in class. Each week, you will individually type up answers, which are handed in at the start of the following week and graded. Each Homework is graded as 0, 1/2 or 1.

Final Project
During the semester, you will look for an open problem to make progress on and write an original result. At the end, you will submit this as your final project. You will each work on your own problem but you are encouraged to discuss together.

Attendance
Attendance is important for you to be succesful in this course. Please attend all lectures if possible and let me know when you will be absent.

Office Hours and Appointments
There will be regularly scheduled office hours, but I am available for drop-ins or appointments outside of office hours as well, depending on my schedule. I want you to do well in this class and checking in with me early can make a big difference. This is a small class so I hope to chat regularly with all of you.

Flexibility and accommodations
If you cannot make an occasional deadline due to health or personal reasons, you can ask for an extension. You do not need to disclose the reason. If you encounter continuing barriers, please let me know as soon as possible, so that we can determine if there is a design adjustment or accommodation that can be made.

Grading
Grades are determined as follows. Each of the 14 Homework sets is worth 1 credit if completed satisfactorily. The final project is worth 3 credits. At the end of the semester, 13 credits are worth an A, 10 credits a B and 7 credits a C.