

Course Syllabus

CSU Math 435: Projects in Applied Mathematics, Spring 2017

Instructor: Henry Adams

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Office: Weber 125

Lectures: Tuesdays and Thursdays 8:00-9:15am in (typically) Weber 205¹

Class Webpage: <http://www.math.colostate.edu/~adams/teaching/math435spr2017>

Topic: Open-ended projects with emphasis on problem identification and formulation, team approach, and reporting results. My main goal is to introduce students to inquiry-based research in mathematics and applied mathematics. The projects will be on topics of your choosing. I encourage students to consider their non-mathematical interests as possible project topics, as together we can brainstorm how to relate these topics to interesting math questions. One of my side goals is that students will become comfortable with writing reports in L^AT_EX, and will have the option to become comfortable with coding projects in Matlab (or other software packages).

Prerequisites:

CS 156, CS 160, CS 253, or Math 151 (coding experience)

Math 229 or Math 369 (linear algebra)

Math 340 or Math 345 (differential equations)

Textook: None.

Exams and homework: No exams or weekly homework assignments are planned.

Requirements: Your final grade will be based on the following components:

5% attendance, punctuality, participation, and engagement,

20% project 1 report,

5% project 1 presentation,

25% project 2 report,

5% project 2 presentation,

25% final project,

15% poster session.

Attendance: I consider attendance and punctuality to be integral parts of this class. Recognize now that you are choosing to take a class at 8:00am. I will be keeping track of attendance and tardiness. Each student is granted an unexcused absence, and an unlimited

¹On Tuesday, January 17, we will meet in Engineering E103.

number of excused absences (so long as you email me in advance—or afterwards in the case of an emergency—and receive confirmation).

Academic Policies and Integrity: Students are expected to adhere to the CSU Academic Integrity Policy as found on the Students' Responsibilities page of the [CSU General Catalog](#) and in the [Student Conduct Code](#). For further policies which apply to all math department classes, please see <http://www.math.colostate.edu/programs/undergraduate/policies.shtml>.

You are heavily encouraged to use outside sources (papers, books, software, datasets, etc.) to augment your projects. Please cite the resources you use.