

Final Project

Math 365, Spring 2014

In lieu of a final exam, you will present a final project on a topic of your choosing. To summarize, your project will involve

- a one page proposal due **Wednesday, April 16**.
- a 3-5 page final project write-up due **Wednesday, May 14**, 5PM, and
- a 10-12 minute project presentations during the last week of classes, or during our regularly scheduled final on **Wednesday, May 14** at **2:30-4:30**.

You may work in teams of two on your final project.

Project Proposal

Part of your final project is a *project proposal*. This is one page write-up that includes the names of the members of your group (at most two), a description of your proposal, the numerical methods you plan to use, the primary references that you will work from, and a statement about what possible conclusions you hope to draw from your project.

Submit your one page proposal to your **Final Project** DropBox folder no later than **Wednesday, April 16**. I'll read over your proposal for approval and provide suggestions for improvement.

Final Project

Your final project will be a 3-5 page write-up (not including code) on the results of your project. Your write-up should include equations, graphs, and a bibliography. You may typeset your project using either L^AT_EX(preferred!), Word or some other typesetting system that allows you to include equations, graphs and easily cite references. In addition to the typeset document, you may also include a webpage that provides supporting material such as links to internet based references, or any movies you create.

Your code can be included in an appendix or in a separate "Publish" document.

Please submit your write-up, code and optional supplementary webpage to your **Final Project** DropBox folder by **Wednesday, May 14, 5PM** at the latest.

Your final project will count for 20% of your final grade.

Project presentations

During class time either the last week of class, or during our regularly scheduled final (**Wednesday, May 14** at **2:30-4:30**) your team will give a 10-12 minute presentation of your final project.

Project Ideas

General examples of topics could come from the following general area :

1. Heat and mass transfer
2. Image processing
3. Detailed numerical investigation of one of the methods discussed in class
4. Thermodynamics or fluid dynamics
5. Geophysics or geosciences
6. Data analysis
7. Computer graphics and animation

8. Fractal design
9. Economics, financial math or business application
10. Any other area of scientific investigation - please let me know if you are having trouble finding a suitable topic.