

PHYS 40 Project HW – submit to Canvas

Project Proposal

Submit short descriptions of **two** ideas for your class project (guidelines below). Give some background for the problem you want to solve and/or the tools you want to create. Also provide as many specifics as possible on how you will tackle the project (data sources, algorithms, available Python packages, etc.) *A one sentence description is not enough!* Please be sure to include citations to sources when available.

An example project report and presentation are provided on Canvas, and feel free to contact me to discuss possible project ideas .

It is highly recommended that you develop a project that connects with a physics, math, or astronomy class that you are currently taking or took/will take very recently.

Project Guidelines to Keep in Mind:

- The project will be worth 20% of your course grade and should be the equivalent amount of work as six or seven labs, plus the written report (in L^AT_EX) and the oral presentation.
- The initial phases of the project will be completed as homework assignments. Some lab time will be available for working on your projects towards the end of the semester. **The full project report will be due on the day of the final exam. The oral presentations will also be held during the scheduled final exam time and you will be required to submit a copy of your presentation on the day of the final.**
- Presentations should be about 10 minutes in length and ideally make use of a few PowerPoint or Keynote slides, and perhaps a demonstration of your code.
- All code that you submit for your project should be clear, follow a logical path, and include comments so that I can understand what you did and run the code without your assistance.
- If you want your project to be part of an existing project for another class or a research job, then your project for this class cannot duplicate any aspect of the other project that you would be doing anyway. Instead, your project for this class must be a separate and unique contribution to your other existing project and provide overall "bonus" value to the original project.