

Physics 501 Final Project Info

The basic idea is for everyone in the class to find a topic related to the course and present a 30 minute talk on it. Your main goal should be to **teach** me and the rest of the class something **new and interesting**.

Finding a topic: As we go along in the course, keep an eye out for topics that you would like to learn more about. You could present a further theoretical development beyond what was presented in lectures, you could talk about an experiment illustrating something discussed in class, you could show in detail a neat and relevant calculation... When you come up with a topic, you need to check with me to make sure that it is appropriate, meaty enough, and that no one else has decided on a similar topic yet.

Sources: You can prepare your talk based on textbooks, review articles or original research articles.

Format: The talk should be in a lecture format, just like normal lectures. You should use the blackboard primarily, and only use the projector if you have graphs/pretty pictures you want to show. Since your main goal is to teach everyone something new, try to prepare as much material as can be comfortably presented in 30 minutes. This is your chance to try your hand at teaching; you should aim at being a better teacher than me. Just like in lectures, questions from the class will be encouraged, and I will probably ask some when I get confused.

Grading scheme: You will be graded on the relevance and appeal of the material you present (ie, on how well you have chosen a topic), on your understanding of the topic, the ability to handle questions, and on the clarity of the presentation itself. In addition to the grade you get from me, there will also be a peer component: everyone in class will grade all presentations.

Organizational details: There are currently 12 people registered in the course. At 30 minutes/person, that's six hours of presentations. We will have to schedule those 6 hours at some point towards the end of the term, possibly leaking over into the exam period. Attendance will be mandatory, since everyone will need to grade all the talks.