

Disciplinary Communication in Physics

1. Educational objectives

To learn to write reports in the style of physics journals and physics theses.

To learn to give presentations in the style of a physics conference talk.

2. How the educational objectives are met in the curriculum

Physics 195A&B is a required two quarter course (3 & 2 units) designed to teach proper writing and presentation techniques and skills. The first several lectures demonstrate good practices in writing and presentation and short writing assignments are given. The last several lectures consist of presentations by students on their thesis projects. These presentations are normally done using a computer and projection. Several small writing assignments are given in class, including evaluations of the talks given by their fellow students and evaluations of theses written in the past. The main writing assignment is the thesis itself, typically 30 to 100 pages, which is written under the supervision of their senior thesis advisor and inspected by the Physics 195 instructor before being approved. One peculiarity of the practice in the department is that the course is generally in the fall and winter quarters, whereas the thesis is normally completed at the end of the spring quarter. If the writing must be done within the course, then the course will need modification so that it is not completed until the thesis is approved. However, it is not a viable option simply to move Physics 195A&B to the winter and spring quarters. The students need the training well before finishing the theses and fall/winter works well for that reason. A few students have the 195 requirement waived when they produce a well-written thesis before enrolling in the course and have satisfied their writing requirement in a different way. The present system works very well and any modification of it should be done cautiously.