

4 Peer Review

Please read the text aloud, and discuss your answers to each question as a group before writing.

Peer review is a hallmark of the scientific enterprise. In order to publish your work in a scientific journal, your initial submission will be critiqued by at least one other expert in your field (called a "referee"). The referee will list all of the required changes you need to make before the paper is acceptable for publication. In some fields, multiple referees will review your paper, and you must convince them all of the paper's worthiness. It is rare for a paper to be unconditionally accepted on the first submission.

In this class, you will be asked to submit a peer review of another group's project report. Remember that you, a student who has taken Physics 211 but not completed their project, are exactly the intended audience!

1. Have you done peer review before? What worked well? When did the process break down and not work well?

2. What do you feel is the *goal* or *purpose* of peer review in this class?

When conducting peer review, you are not being asked to “grade” the paper in the way that your instructor will grade it. Nor are you being asked to “edit” the paper by correcting spelling, grammar, or sentence structure. Rather, you are offering helpful feedback from the perspective of a student with similar science background. You will be asked to complete the following steps in your peer review:

1. Briefly summarize the paper’s intentions and results.
2. Identify at least two strengths of the paper.
3. Identify at least two aspects of the paper that are weak, problematic, or ineffective.
4. Make at least two directive statements (specific suggestions) recommending the most important changes that the group should make for their next draft.

For your review to be the most helpful to the group receiving it, your writing should also be clear and demonstrate an understanding of the requirements of the project.