

## Physics 346, Grading Information

In-class exercises will use a 4-point scale:

1 = any start

2 = any vaguely-related QM understanding

3 = a start in the right direction / concept

4 = satisfactory understanding (may not be complete / correct)

Test and HW questions will usually use a 10-point scale:

**10: EXCELLENT = Complete and correct.**

All explanations given, and the results follow sufficient work to show conceptual and mathematical understanding.

**9:** 1 minor problem:

**ex.:** One part of a multi-part question has incorrect mathematical development, one part of a multi-part question uses an incorrect but *very* closely related concept.

**8: GOOD = More than a satisfactory start:** 2 minor problems (see above) or 1 significant problem: **examples:**

Part of a multi-part problem is ignored / poorly addressed (*not* the main piece), the overall problem's setup is fairly close to correct and the work follows through properly from that premise, the overall problem's setup is correct but the mathematical development is significantly incorrect or incomplete

**NOTE: The scores above assume a reasonable annotation for the "explanation" portion in homework questions.**

**No HW explanation = -3 pts, very poor HW annotation = -2 pts**

**7: SATISFACTORY start, e.g.:**

– wrong concept but the concept used is related to elements of the problem AND there is significant mathematical development

– one part of a problem is correct but a significant part of the problem (e.g., 1 of 2 things) is poorly addressed

**6: Less than satisfactory, but more than minimal work** (Usually the minimal start plus some problem development, see below)

**5: PASS/FAIL Boundary = Minimal start:**

I give a "highest failing grade" for reasonable attempts to show some basic understanding of a problem.

This requires identifying *something* related to solving the problem **as well as giving some explanation, if it's a homework problem.**

The clearest demonstration is to give equations appropriate to the situation and explain why the equations are appropriate, even if you can't develop them further

Fewer than 5 pts may be earned for less than the minimal start. I typically give 2–4 pts for identifying an equation without explanation on a homework problem, identifying both correct and incorrect concepts / equations, etc.