

How to Estimate Your PHY2004 Grade

Example Student Scores, so far:

- Current HW: 86.23%
- E1: 60%
- E2: 46.67%
- E3: 54.2%
- Current H-ITT: 43/74 pts

Think of the course as being scored out of 100 points. Of these points, 10 come from HW, 20 from each of the three midterm exams, and 30 from the final. The H-ITT is worth up to 5 points extra credit. The forgiveness factors are multipliers, as you'll see below.

Note that as we are not done with the course yet, your HW and H-ITT points will vary a bit before the end of the semester, but you can use your current scores as a reasonable approximation.

We'll walk through the HW in detail and score the rest in a similar fashion: Our example student above has earned 86.23% on the HW. With a 20% forgiveness factor, this score becomes $86.23\% \times 1.2 = 103.476\%$. As you cannot get more than 100% in any of the categories, this will round to a 100% on the HW. This means that the student gets 100% of the 10 points the HW is worth, or 10 points. Continuing:

- (HW: 10 pts)
- E1: 60% of 20 possible points, or 12 pts
- E2: 46.67% of 20 possible points, or 9.334 pts
- E3: 54.2% of 20 possible points, or 10.84 pts
- H-ITT (20% forgiveness): $(43/74) \times 1.2 = 0.6973$, or 69.73% of the 5 possible points, or 3.49 pts

Adding all of these up, this student has so far earned 45.66 points in the course so far. All that is left is the final exam, which is worth 30 points. Say our student is aiming for a C+, which requires 59.50 course points. That means of the 30 available on the final, they need to score $59.50 - 45.66 = 13.84$ points. That is, $13.84/30 = 0.4613$ or a 46.13%. There are 30 questions on the final, so the student must answer at least 14 of them correctly in order to score at least a 46.13%, thereby earning a C+.

Note that even this isn't *quite* correct, as I will replace your lowest midterm percentage by your final exam percentage (assuming that the final exam percentage is higher). Assuming the student gets 14/30 questions correct, their final exam percentage will be 46.67%. Since this is equal to the lowest midterm percentage, nothing would be changed in the final grade calculation as conducted above. Say instead that the student gets 17/30 correct – or a 56.67% – then the E2 grade will be updated, resulting in a final total of 64.66 course points, earning a B-.