

PHY2048 Overall Course Grade (*Estimate*)

Your overall course score (in %) is evaluated from the following three terms:

$$\text{Overall Course Score} = \text{Exams} + (\text{HW} \times \text{Quiz}) + \text{HITT}$$

Exams: Your overall exam score is given by

$$\text{Exams} = \frac{(\text{Ex}1 + \text{Ex}2 + \text{Ex}3 + \text{Ex}4)}{80} \times (70\%)$$

Ex1, Ex2, and Ex3 are your exam scores. The exams will be 20 problems each with one point per problem. Ex4 is the cumulative final exam which is also 20 problems and is weighted equally with the other exams, giving a total possible exam score of 80 points (hence the division by 80). The exams are weighted to count for 70% of your overall course score.

HW×Quiz: Your overall (HW×Quiz) score is given by

$$(\text{HW} \times \text{Quiz}) = \frac{\sum_{n=1}^{15} (\text{HW}_n \times \text{Q}_n)}{(0.9) \times \text{HW}_{\text{tot}}} \times (25\%)$$

$\text{HW}_n \times \text{Q}_n$ is the weekly homework score, HW_n , multiplied by the associated quiz score (as a fraction of 1.00), Q_n , for n^{th} assignment. These are summed over all 15 assignments of the semester and divided by the total number of assigned homework problems, HW_{tot} , (~130 problems) minus 10% (forgiveness for illness, etc. ...).

$$\text{HW}_{\text{tot}} - 0.1 \times \text{HW}_{\text{tot}} = (0.9) \times \text{HW}_{\text{tot}}$$

The (HW×Quiz) portion is weighted to count for 25% of your overall course score. You can not get more than 25% for this portion so if the 10% forgiveness results in you getting more than 25%, you will only get the full 25%.

HITT: Your overall HITT score is given by

$$\text{HITT} = \frac{\sum_{n=1}^{\text{all}} \text{HQ}_n}{(0.8) \times \text{HQ}_{\text{tot}}} \times (5\%)$$

HITT is the sum of all the HITT points, $\sum_{n=1}^{\text{all}} \text{HQ}_n$, you have received, divided by the total number of HITT points possible, HQ_{tot} , (~100 problems) minus 20% (forgiveness for illness, missed classes, etc...).

$$\text{HQ}_{\text{tot}} - 0.2 \times \text{HQ}_{\text{tot}} = (0.8) \times \text{HQ}_{\text{tot}}$$

The HITT portion counts for 5% of your overall course score. You can not get more than 5% for this portion so if the 20% forgiveness results in you getting more than 5%, you will only get the full 5%.

Grading Scale: THERE IS NO CURVE IN THIS CLASS. Curves pit students against each other in competing for a better grade but education research has shown that learning from peers can be an effective learning aid both for the students who get the help and for those who give the help (the latter clarifying their thoughts in the process). You are encouraged to form study groups and work together to bring the entire level up. We would be happy to give all A grades in this class.

Grade Scale (fixed)

A	$\geq 90\%$
B+	$\geq 80\%$
B	$\geq 70\%$
C+	$\geq 60\%$
C	$\geq 50\%$
D+	$\geq 45\%$
D	$\geq 40\%$
E	$< 40\%$

Example Grade Projection:

Suppose we have completed exams 1 and 2, with your scores being $Ex_1=12$, $Ex_2=15$. Let's assume that you perform at the same level for Ex_3 and Ex_4 (*i.e.* $Ex_3 + Ex_4 = 27$). Suppose that to date we have had 78 homework problems and after multiplying each HW set by the associated quiz score you have 54 ($HW \times Q$) points. Assuming that you continue to perform at the same level (for 130 problems) we get $(HW \times Q) = (54/78)(130) = 90$. Also, let's assume that you get $3/5$ of a possible 100 HITT problems. In this case,

$$Exams = \frac{(12 + 15 + 27)}{80} \times (70\%) = 47.25\%$$

$$(HW \times Quiz) = \frac{90}{0.9 \times 130} \times (25\%) = 19.23\%$$

$$HITT = \frac{\frac{3}{5}(100)}{0.8 \times 100} \times (5\%) = 3.75\%$$

and

$$\text{Overall Course Score} = 47.25\% + 19.23\% + 3.75\% = 70.23\%,$$

which corresponds to a grade of **"B"** (*barely!*).