

How to estimate my grade in MATH 2164?

This handout is supposed to help you estimate your grade in MATH 2164, by providing a sample calculation. The rules how to compute the course grade are detailed in the syllabus. Keep in mind, you need to have at least 90% overall to get an “A”, at least 75% to get a “B”, at least 60% overall to get a “C”, and at least 50% overall to get a “D”. Just replace the numbers below with your numbers provided on Canvas, and do the math!

Suppose Claire had 3 absences (this would show up on canvas as -1 on three entries labeled “L”), one absence was excused, her score on the written homework was $70/123$, on webwork it was $98/87$ and her test scores were 66 and 77. Each unexcused absence decreases Claire’s course grade by one percent point, up to five points. By having 2 unexcused absences, Claire earns 3% for attendance instead of 5%. If she had 5 to 7 unexcused absences she would earn 0%, and with 9 absences or more she would get an automatic “F”. You should not continue estimating your grade if you see you had 9 or more absences, even excused ones.

Next we compute the homework score. The denominators 123 and 87 on the written homework and on Webwork are the total number of points that were available. So, at this point, there were $123 + 87 = 210$ points available, and she earned $70 + 98 = 168$ points. Claire’s performance on the homework is thus $168/210 = 80\%$. The test performances are easier to compute: 66 points is 66% and 77 points is 77%.

According to the syllabus, the weight of the homework is 18%, the weight of each test is 22% and the weight of the final exam is 33%. Assuming Claire scores x percent on the final, her overall performance will be

$$3\% + 0.18 \cdot 80\% + 0.22 \cdot (66\% + 77\%) + 0.33 \cdot x\% = 48.86\% + 0.33 \cdot x\%$$

If Claire only wants a “D,” the solution of

$$48.86\% + 0.33 \cdot x\% \geq 50\%$$

is $x \geq 3.45\%$, so Claire only needs to sign her name and answer one question correctly. If she wants a “C,” the solution of

$$48.86\% + 0.33 \cdot x\% \geq 60\%$$

is $x \geq 33.76\%$. Claire can still get even an “F” on the final, but she must answer about one third of the questions correctly. If she wants a “B,” the solution of

$$48.86\% + 0.33 \cdot x\% \geq 75\%$$

is $x \geq 79.21\%$, she needs to earn a strong “B” on the final. Finally, if she wants an “A”, the solution of

$$48.86\% + 0.33 \cdot x\% \geq 90\%$$

is $x \geq 124.66\%$, which is not possible to get, unfortunately. Just like on the tests, there will be a possibility of scoring 105% on the final, but not more.