

Extra Credit Writing 6 (Deadline Apr 22, 11:59 PM)

This extra credit assignment is worth at most 5 extra credit points.

Prompt. After doing some research on the internet, tell me how carbon dating works.

To show me that you understand, suppose that you found a piece of fabric where the ratio of Carbon 12 to Carbon 14 is given by 3:1. How old is the piece of fabric? Is this worth donating to a museum?

Make sure your answer includes some discussion of exponential functions. What is the half-life of Carbon 14? Why does this allow you to compute k ? Why does this allow you to estimate the age of the piece of fabric?

Miscellaneous guidelines. Usual formatting guidelines. Upload on Canvas in **PDF format** by the above indicated deadline.