# Homework Five
## Thermodynamics
## College of the Atlantic

**Due Friday, April 30, 2021**

There is one part to this assignment.

**Part 1: Problems from the Textbook**. Here are some instructions for how to submit this part of the assignment.

- Do the problems by hand using pencil (or pen) and paper. There is no need to type up this assignment.

- Make a pdf scan of your work using genius scan or some similar scanning app. Please make the homework into a single pdf, not multiple pdfs.

- Submit the assignment on google classroom. Please don't email it to me.

- If you want to do one or more of these problems one or two other people and hand in only one write-up, go for it.


1. 2.21 (Use Wolframalpha or desmos or whatever you're used to using.)

2. 2.26 (Be sure you explain how you arrived at your answer.)

3. 2.17 (**Optional.** In this problem you'll determine an expression for the multiplicity of an Einstin solid for $q \ll N$. Good practice using Sterling's approximation and the Taylor expansion for the natural log.)