

# Chromatography of Spinich Lab Expectations and Grading (**Due March 4, 2022**)

Chem 112000-2: Section-33

February 28, 2022

## 1 General Remarks

This can be handwritten or typed, though typed is easier to read/grade. Or, some portions can be handwritten and some can be typed. Though, you may run out of space if you try and handwrite it. If it is handwritten, make sure that it is legible and the scan is readable. Note this assignment is due Friday **March 4, 2021** at 5:30 pm.

If something still doesn't make sense, please email me!

## 2 Pre-Lab Questions (20 points)

Each question is worth 10 points. For question 1, please draw  $\beta$ -carotene and chlorophyll A. You may hand-draw or find this tool helpful. Finally, find the absorbance spectra for both of these molecules and determine which wavelength  $\lambda_{max}$  will yield the highest absorbance.

Question 2 is straight-forward. Be mindful of sig figs and units!

## 3 Experiment and Analysis (20 points)

Each question is 5 points each. This should mimic your observations and notes from the videos. IE, what is happening during the collection? Any color changes? Specifically, for the first 2 question, you should answer these more from the perspective of describing the method, and also the color of solutions.

For the last question, you **NEED TO** sketch the spectra measurements as part of your description to receive full credit.

In general, you should not write a single sentence.

## 4 Discussion (60 points)

Each question is worth 10 points each. For all questions, you should not just respond with a single sentence. You should write down your thought process and logic for WHY you think something is so. Answers that are brief and that do not show your thought process will receive minimal points even if they are correct. I believe all of the questions are straight forward otherwise and ask that you critically think about the experimental procedure and how it would impact your results.