

## Chem 300A Project 2 Spring 2020

The objective of this project is for you to compare 2-4 brands of the same product class, explain the function of each chemical and make a recommendation on which one of the brands should be bought. The report should be written for a reader who has had a high school or 1<sup>st</sup> year chemistry course a few years ago.

The products must have **at least 6 chemical ingredients** (excluding water) and you should choose compounds with different selling points. For example, you could compare products with different efficacy claims ('longest lasting', 'whitest whites', 'heavy duty', etc.), purported environmental friendliness or price points. The products should have different chemical ingredients, preferably with **at least one different active ingredient**.

In your report, you should **create a comparison table** showing all the ingredients in each brand. You should explain the function/purpose of each ingredient and if there are significant differences, you should attempt to find out which ingredient is most effective and safest. You should **append the MSDS sheets for two significant chemicals** found in these products to illustrate any health concerns for specific chemicals and to explain how to use the MSDS information. You should conclude your report with a clear recommendation as to which product to buy based on effectiveness, safety and cost considerations. **The report should not exceed 10 pages in total (spaced 1.5 lines).**

**Presentation:** your group will be asked to do a short presentation on your findings in one of the last two lecture days. This should be prepared together and presented by the group or by a small subset of the group as a short Powerpoint presentation. Aim for an 8-10 minute (*at most*) summary of your findings with time for a few questions.

### *A couple of notes:*

- You don't have to buy anything: you could take a photo of the ingredients listed on the product and note the price
- Material Safety Data Sheets (MSDS or SDS) can be found free online for almost all chemicals (manufacturers of the original chemicals, but not the final product, are required to make them available)