The University of Iowa
Department of Chemical and Biochemical Engineering
CBE:2105—Process Calculations

Topical Paper
Draft due Sept. 20th
Rewrite due Oct. 18th

Topic of Paper: This writing assignment should be a paper about a research area or a topic that interests you and is connected to Chemical Engineering. The paper should explain the importance of the topic and the science supporting the topic to a general audience (high school/entry college level education).

Possible topics include:

- Sustainable energy for the future
- Future advancements in biotechnology
- Innovation of novel materials
- Any other future developments that chemical engineers have or are destined to impact.

Logistics: This writing assignment will consist of a 500-1000 word (~1-2 single-spaced pages) report. It should include the following on the top of the first page: (i) your name, (ii) paper title, (iii) course number and course name, and (iv) date. Also, be certain to number the pages (centered at the bottom of page) if your report is more than one page.

A draft of your paper (*due in Word format by 10PM on Sept. 20th in the ICON assignment folder*) will initially be evaluated by staff of the Hanson Center for Technical Communication (30% of the final topical paper grade). You will then be expected to incorporate their feedback in a rewrite, and your final rewrite will be evaluated by Dr. Rundlett (*due in Word format by 10PM on Oct. 18th in the ICON assignment folder*). The grading matrix will be posted on the ICON course website.

References:
Cite all papers and websites you used and compile a bibliography at the end of your topical paper. (Note that anything you write is either "common knowledge," your original ideas, or somebody else's work that must be cited.)

It is important to evaluate the credibility of the sources of the information. The C.R.A.A.P (Currency, Relevance, Authority, Accuracy, and Purpose) Test developed by the Meriam Library, California State University (2010) is a good way to evaluate the source. An overview of this is work is posted on ICON.

For your bibliography, use an appropriate style. For example:

Kline, B. J., Lele, S. S., Lenart, P. J., Beckman, E. J., Russell, A. J. 2000. Use of a batch stirred reactor to rationally tailor biocatalytic polytransesterification. Biotech. Bioeng. **67**: 424-434.

with the citations arranged alphabetically by the first authors. Alternatively:

1. Kline, B. J., Lele, S. S., Lenart, P. J., Beckman, E. J., and Russell, A. J., Biotech. Bioeng. **67,** 424 (2000).

with the papers numbered by the order in which they are cited. Whichever style you use, be consistent.

Be sure to cite these references properly in your topical paper. If you use the first style, you would cite it as (Kline 2000). For the second style, you typically either use a superscript[1] or the citation in brackets (1). Again, be consistent. When in doubt, look it up.

- Remember to give credit where credit is due! Use footnotes or endnotes when quoting (enclose in quotation marks too) and paraphrasing from your sources.
- If you need a refresher on this, please see:
  - The UI COE Hanson Center for Technical Communication: https://engineering.prod.drupal.uiowa.edu/sites/www.engineering.uiowa.edu/files/wysiwyg_uploads/ctc_guide_avoiding_plagiarism.pdf
  - The Writing Place at Northwestern University: http://www.writing.northwestern.edu/avoiding-plagiarism/
  - Meriam Library, California State University, Chico: https://www.csuchico.edu/lins/handouts/eval_websites.pdf