

# First Semester Project: Chemistry I (P)

The duty of the man who investigates the writings of scientists, if learning the truth is his goal, is to make himself an enemy of all that he reads, and ... attack it from every side. He should also suspect himself as he performs his critical examination of it, so that he may avoid falling into either prejudice or leniency.

— Alhazen

For the first semester, you will be writing a researched **opinion paper** based on a recent scientific study related to chemistry. For the purposes of this paper, “recent” means published within the last year.

## SOURCES FOR ARTICLES

The teacher will provide a variety of pre-approved, recommended articles. You may also choose one not among those provided. The article you choose must be about a recent scientific study or experiment and must relate to chemistry.

Two sources for recent articles can be found at the following sites:

<http://www.sciencedaily.com/>

<http://www.sciencenews.org/>

NOTE: You may use articles you find from other sources—other websites, or even a newspaper or magazine article. The source should be a reliable journalistic or scientific publication. It may NOT be an article from Wikipedia or some similar site. Also, make sure the article is related to chemistry and highlights some research done recently. If you are uncertain whether the source or the article is acceptable, *check with me first*.

## RESEARCH

You will need to do some additional research besides just reading your article itself. This research will likely fall into two categories: 1) research on the specific topic of your article to support your opinion on the research and whether or not it should be continued; and 2) research on the background concepts in your article. The second may be especially important in terms of understanding the article itself.

In most cases, the article you have read will make reference to a fuller report published in a journal or another scientific publication. When possible, you should track down the original article. You may not always be able to do so; as in some cases the only way to find the text online is to subscribe or pay-to-download. I am not expecting you to do this—but if you can find the text of the original report, you can and should use it as part of your research.

For the background research, you may use any reliable print or web source. Note: do NOT use Wikipedia as a source; though you can use it to find other sources via the links at the bottom of their articles. You should use **at least four sources, aside from the article**. If you need help finding sources, please come to tutorial, so I can help you.

## CONTENT

Your paper should include or address, *at minimum*, the following:

- Your opinion on the value and validity of the research.
- A summary and explanation of the research in article you read, in your own words, which includes any background information necessary for understanding. You must tell what the independent variable and dependent variable were.
- Your opinion on whether the research results are credible (trustworthy).
- Your opinion on whether the research is worthwhile AND WHY, supported by information from credible sources.
  - If the topic is controversial in some way, state and defend your opinion on the matter. For example if it's scientifically controversial (in other words, scientists do not all agree on it), take a side and defend your choice. If it's politically or ethically controversial, explain and defend how you believe the issue should be handled.
  - If the topic itself is not controversial, then you should take and defend a stance on whether the topic is worthy of further research. For example, if you were in charge of deciding whether or not to give more funding to someone researching in the area, what would you decide and why?
- Why the topic is important.
  - How has/will it change our understanding or practice of chemistry?
  - What are the broader implications of the topic?
  - What have other scientists thought or said about the topic?
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## REQUIREMENTS

- The paper should be 3-4 pages, APA format. Note: the Works Cited page is separate from the 3-4 pages of the paper.
- Note that all information and thoughts that are not your own must be cited; but in addition, you should have at least three direct quotations, properly cited.
- You should have at least four sources, besides the article.

## DUE DATES

- If you wish to turn in a complete rough draft for feedback, it is due by Wednesday, October 31. You are *not* required to turn in a rough draft, and it is *not* part of the grade.
- The paper will be due November 14. **LATE PAPERS WILL NOT BE ACCEPTED UNDER ANY CIRCUMSTANCES OR FOR ANY REASON.**
- [Your article must be shared with me or shown to me by September 6, 2018.](#)