# Chem-128-GDL Research 1: General-Interest Article

# Queensborough Community College

Due: 19 November 2014 8:10 AM

1. (5 points) Select an article from the mainstream general-interest press that discusses a chemical issue of global importance in materials, health, energy technology, or the environment. The issue must affect multiple communities so that you can analyze it from *multiple perspectives*.

#### Requirements:

- The article must be available in print, even if you find it in digital form. No on-line only sources are allowed for this course.
- The article ought to be several paragraphs long. If you use a "brief" to choose a topic, find a longer article to supplement your choice.
- Cite the article according to MLA format. Submit the citation to your (private) journal on Blackboard. You may include a URL, but you must cite the article properly.
- Your article may come from the science or technology section of a publication, but the publication must be of general interest. Avoid political or other special-interest journals—science- or business-oriented, for example—for now.

#### Potential sources:

- Good: New York Times, Financial Times, Economist, LA Times, Chicago Tribune, Guardian, Times (UK), Wall Street Journal, Christian Science Monitor
- Good enough: Time, US News and World Report, most other large-circulation newspapers
- Poor: USA Today, Investors Business Daily, Newsday, most other tabloids

### Potential topics:

- Climate change
- Diagnostic devices
- Disposal of chemical weapons
- Disposal of plastics
- Food preservation
- Green revolution

- Organic or alternative farming
- Development of pharmeceuticals
- Petroleum industry
- Pollution of a certain type, like soot
- Pollution at a certain area
- Preservation of cultural heritage or artifacts

### **Emphatic suggestions:**

- Look for a topic related to the syllabus of *introductory organic chemistry*, including topics related to biochemistry.
- Consult a guide for the proper format of your citation.
- Consult a librarian about an appropriate article or resource, such as LexisNexis.
- Your topic may be come more or less narrow as your research proceeds.
- See me in office hours in room S-448

Monday, 1:00–2:00 PM Wednesday, 10:00–11:00 AM Thursday 1:00–2:00 PM (also by appointment)

# Chem-127-GDL Research 2: Bibliography

# Queensborough Community College

Due: 26 November 2014 8:10 AM

1. (5 points) Find at least two additional articles that discuss your chemical issue of global importance in materials, health, energy, technology, or the environment. The issue must affect multiple communities so that you can analyze it from *multiple perspectives*.

The articles *must* come from *at least two different* categories from the following. Drawing on a variety of resources will help you to identify and present multiple perspectives on the issue.

# ${\bf Requirements:}$

- The articles may not be from Wikipedia or similar sources, although blogs or aggregator websites (such as scienceblogs.com) may help you to find sources.
- Some of your sources may be on-line only; see below.
- The sources ought to be several paragraphs long. Shorter articles will contribute nothing to a short (750–1500 words) paper.
- Cite the articles according to MLA format. Submit any citations to your journal on Blackboard.

#### Potential sources:

- Science- and health-oriented press: Scientific American, Seed, New Scientist, Discover, National Geographic, Popular Science, Chemical and Engineering News (C&EN)
- Business-oriented press: Bloomberg BusinessWeek, Forbes, Fortune, Harvard Business Review
- Government publications: science.gov, www.uspto.gov, europa.eu (web-only ok)
- Non-profit think-tanks or non-governmental organizations (NGOs): WHO, FAO, NBER, OECD, scidev.net, World Bank, IMF, Federation of American Scientists, Union of Concerned Scientists, Bill and Melinda Gates Foundation (web-only ok; there are TONS of these organizations)
- The news-section of scientific journals: Analytical Chemistry, Cell, Journal of American Chemical Society, Science, Nature, New England Journal of Medicine

  Note: All of the journals listed immediately above are high-profile scientific publications for professional researchers. The research articles are difficult to read and unlikely to be useful. The first several pages of each issue, however, typically feature news for a general audience. The library can help access these journals.

- The lists above are not exhaustive
- A database-search using LexisNexis may lead you immediately to dozens of sources in several categories. Congratulations—you're done ... maybe
- ... the point is not simply to find a few articles, but to *identify multiple communities* affected by the issue. If your articles do not allow you to do that, then you need to find additional articles.
- Write me e-mail (dbruzewicz@qcc.cuny.edu) or post to Blackboard for guidance.

# Chem-128-GDL Research 3 BONUS : Extended Bibliography

# Queensborough Community College

Due: 1 December 2014 8:10 AM

1. (up to 5 Bonus points) Find at least one additional source that discusses your chemical issue of global importance in materials, health, energy, technology, or the environment. This *optional* source will draw from some unusual or specialized categories of media (see Potential Sources, below).

### Requirements:

- The additional source(s) must be accessible to your instructor. You may provide a copy or a link to grant access.
- Cite the source(s) according to MLA format. Submit any citations to your journal on Blackboard.
- For full Bonus credit, the additional source(s) must be challenging and highly relevant to your topic.
- For full BONUS credit, the final paper must also make appropriate use of the source(s).

#### Potential sources:

- Long-form press: Atlantic Monthly, Harper's, New Yorker, Foreign Affairs, New York Review of Books, Smithsonian Magazine, longreads.com
- Politics- or advocacy-oriented press: American Conservative, American Prospect, Nation, National Review
- Peer-reviewed scientific research: Analytical Chemistry, Cell, Journal of the American Chemical Society, Science, Nature, New England Journal of Medicine, etc.
- Annual reports or presentations by a corporation affected by the topic
- Books Note: One need not read an entire book to cite the relevant material.
- Documentaries or other videos
- Personal communication or interview with an authority on the topic
- Foreign-language press: Any category listed here or on previous assignments (at the instructor's discretion)

- Appropriate sources from the categories above can be difficult to find and use. Do not force something strange into your paper in search of an extra point or two.
- The lists above are not exhaustive.
- A database-search with a librarian's help will likely find. several research articles, but beware—these really are difficult to read.
- Write me e-mail (dbruzewicz@qcc.cuny.edu) or post to Blackboard for guidance.

# Chem-128-GDL Research 4: Outline

# Queensborough Community College

Due: 1 December 2014 8:10 AM

1. (5 points) Outline your paper according to the template, below. Include a *complete* bibliography in MLA format. Post everything to your journal on Blackboard.

#### Format:

Please use headings in the outline where appropriate—both to help organize your thoughts and to show the instructor that all required components are present.

- TITLE: an informative title (not, for example, "Chem Paper Outline")
- Introduction: What topic did you chose? Why is your topic important? How does it relate to global concerns, such as sustainability? Briefly, how does your topic affect different communities and how is it relevant to material discussed in CH-128?
- Body, minor part: Expand on how your topic relates to material covered in CH-128. The connections may be broad or mostly related to material we have not yet discussed, but you must convince the reader that your topic is appropriate for the assignment.
- BODY, MAJOR PART: For each of at least three communities affected by the global issue—
  - Identify and define the community. Where are its members located? What are its most important characteristics? It is a geographical group, an ethnic group, a group defined by some economic or health-related status, etc.?
  - Describe how the group is affected by the issue. Include quotations, if applicable. What challenges or opportunities does the issue present?
  - Identify and describe the communities' consensus view (or views, if opinion is evenly split) toward the issue. What response would the community advocate? You may imagine various scenarios and responses, such as at local and national or global levels.
- Body, Discussion: Analyze and criticise each consensus view. Is it reasonable for a particular community to hold its view? Why, and according to what evidence? Do any communities appear in conflict with the balance of evidence? Do any communities appear in conflict with each other? Do any communities advocate a response that is unreasonable, impossible, or otherwise ill-advised? Explain.
- CONCLUSION: Propose a response to the global issue. You may largely agree with one or more communities identified above, but you must defend your position. Why advocate such a response? What communities might object? How would you answer their objections?
- Bibliography in MLA format.

- Try to identify communities with clear interest in the issue.
- You may wish to outline by hand before submitting to Blackboard.
- Format sensibly and use spell-check.
- Write me e-mail (dbruzewicz@qcc.cuny.edu) or post to Blackboard for guidance.
- Visit the Campus Writing Center for additional advice.

# Chem-128-GDL Research 5: Rough Draft

## Queensborough Community College

Due: 8 December 2014 8:10 AM

1. (5 points) After your outline has been approved by your instructor, write a *complete* rough draft. You may decide to rearrange some elements of your original outline or not to use others, but the structure of your draft must still follow the structure below.

As you write from the outline, you will condense and summarize some portions of the outline; at other parts of the paper, you may need to add linking passages or explain your sequence of ideas more explicitly. *Cite appropriately* throughout the text in MLA format.

Compose (and save) the draft in your usual word processor or text editor and post the *complete* rough draft, including the bibliography, to your journal on Blackboard. You may consult your instructor's public blog on Blackboard for an example of an outline.

#### Format

*Please use headings* in the draft where appropriate—both to help organize your thoughts and to show the instructor that all required components are present.

- TITLE: an informative title (not, for example, "Chem Paper Outline")
- Introduction: What topic did you chose? Why is your topic important? How does it relate to global concerns, such as sustainability? Briefly, how does your topic affect different communities and how is it relevant to material discussed in CH-128?
- BODY-CHEMICAL BACKGROUND: Expand on how your topic relates to material covered in CH-128. The connections may be broad or mostly related to material we have not yet discussed, but you must convince the reader that your topic is appropriate for the assignment.
- Body—Global communities: For each of at least *three communities* affected by the global issue—
  - Identify and define the community. Where are its members located? What are its most important characteristics? It is a geographical group, an ethnic group, a group defined by some economic or health-related status, etc.?
  - Describe how the group is affected by the issue. Include quotations, if applicable. What challenges or opportunities does the issue present?
  - Identify and describe the communities' consensus view (or views, if opinion is evenly split) toward the issue. What response would the community advocate? You may imagine various scenarios and responses, such as at local and national or global levels.
- Body—Discussion: Analyze and criticise each consensus view. Is it reasonable for a particular community to hold its view? Why, and according to what evidence? Do any communities appear in conflict with the balance of evidence? Do any communities appear in conflict with each other? Do any communities advocate a response that is unreasonable, impossible, or otherwise ill-advised? Explain.
- CONCLUSION: Propose a response to the global issue. You may largely agree with one or more communities identified above, but you must defend your position. Why advocate such a response? What communities might object? How would you answer their objections?
- Bibliography in MLA format.

#### Emphatic suggestion:

• Remember that your first draft is not the same thing as a rough draft. (Also, every emphatic suggestion from earlier assignments)

# Chem-128-GDL Research 6: Final Draft

# Queensborough Community College

Due: 15 December 2014 8:10 AM

1. (25 points) If you have kept up with the assignments so far, then revising the rough draft to yield the final draft ought to be fairly easy. If your rough draft requires heavy revision, note the grading, below.

Carefully consider all comments on your rough draft. Also think about the writing workshop (Wednesday, 10 December), because some of the errors discussed there may lurk in your rough draft.

Re-read the entire rough draft—or have someone else read it for you—and look for mistakes, omitted citations, or unclear passages *everywhere* (not only where someone marked it up). *Revise thoroughly* using your usual word processor or text editor, then *post to your journal*. Your instructor will grade the electronic copy.

#### Format:

Please remove the headings that you used in your outline and rough draft. Headings are often helpful, but the structure of a short, properly revised paper ought to be clear without headings.

Cite appropriately and include the complete bibliography. If you have added sources since completing the earlier assignments, update the bibliography accordingly.

#### Grading:

- 5 Introduction and Chemical Background Identify and define the global issue and any important terminology. Connect the issue to CH-128.
- 5 Body—Global communities Identify three important communities affected by the issue and explain their viewpoints on the issue.
- 5 DISCUSSION AND CONCLUSION
  Weigh the interests in light of available evidence
  and propose a well-argued way to address the
  issue.
- 5 BIBLIOGRAPHY AND CITATIONS

  Cite consistently according to MLA format
  throughout; do not include unsourced information
  or quotes.
- 5 Grammar and Style
  Write in complete sentences, with correct punctuation and appropriate tone.

- Format sensibly and use spell-check.
- Visit the Campus Writing Center for additional advice, especially if your instructor explicitly asked you to do so.
- Remember: even if no-one criticized a passage, you can still improve it.

# Chem-128-GDL Research 7 BONUS : Sharing and Discussion

Queensborough Community College

Due: 22 December 2014 7:45 AM (before the Final Exam)

- 1. (3 Bonus points) Re-post your final draft to your *Public GDL Journal* on Blackboard so that other students may read and comment on it.
- 2. (2 Bonus points) Read another student's paper and write a thoughtful comment (50–100 words). What did you learn from the paper? What other viewpoints might the author have considered?

Truly ambitious commenters or readers of multiple papers may earn additional Bonus points ... but you may prefer to study for other courses.

#### Format:

You may include additional revisions since submitting the final draft to your instructor, if desired.

All comments must be thoughtful and show that you have read the entire paper.

## Emphatic suggestions:

• Enjoy the holidays.