

MONT 109N – Mathematics Across Cultures  
Paper 1 – due February 25, 2011

*General Information*

Your first larger writing assignment this semester will be an essay responding to the questions below about our Natural World Cluster common reading, *Collapse*. All submissions should be prepared using MS Word or equivalent software. The final version of the paper will be *about 5 double-spaced pages in length* (but don't worry if you go a bit over or are a bit short – the length is not the main point). Submit all work to me by email at:

little@mathcs.holycross.edu

In order to give you more practice thinking about structuring this kind of essay, the assignment will be in two parts:

- Due by 9:00am on Wednesday, February 23: A draft *opening paragraph and outline* for your paper – I will return these with comments by Friday, February 25.
- Due by 5:00pm on Monday, February 28: The finished paper.

*Everyone will have the opportunity to submit a revised version of the full paper after receiving my comments. If you choose to resubmit, I'll evaluate the new version in the same way and count only the better of the two sets of marks.* The due date for resubmissions will be announced when the papers are returned.

*Description*

This is not primarily a “research paper” – you need not consult sources other than *Collapse*, although you may find that you want to do that to get more perspective on some of these questions. In any case, you should think of your essay as *a detailed defense of a particular conclusion about, or response to the questions in one of the topics below*, written in a reasonably formal style incorporating correct grammar, spelling, and usage.

The specific questions you are addressing and your response(s) to them should be clearly stated in the first paragraph. Then the body of the paper should be a presentation of the reasoning and the evidence that lead you to your conclusion.

Your essay should be well-structured with paragraphs corresponding to the major points in your outline, arranged in a logical sequence. Your job is to convince your reader of the soundness of your conclusion, starting “from the beginning.” That is, you should not assume the reader has been present for any of the discussions that we have had in class, or that you might have had with other Natural World Cluster students. You might try explaining possible opposing points of view, then giving your reasons for rejecting them, as part of your argument.

I will expect to see specific details from the text cited as *evidence* to support your assertions, and in many cases short quotations from the text will be the most effective way to provide evidence. Please identify any such quotations by the page(s) on which they appear. Use the following style:

Diamond writes that our world cannot sustain China and other Third World countries and current First World countries all operating at First World levels (Diamond, p. 376).

If you do use other sources and use quotations or other information, you should:

- 1) Identify direct quotations with quotation marks
- 2) All direct quotations and *paraphrases* of arguments found in *Collapse* or other sources should be identified by notes in parentheses giving information where the quote can be found within your source,
- 3) List all your sources in a References section at the end of your paper:
  - a) For books, give the author, the title, the publisher and year of publication.
  - b) For magazine or newspaper articles, give the author, the title of the magazine or newspaper, the date of publication, and the starting and final page of the specific article.
  - c) For web sites, give an author (if you can determine that), the full URL (web address) and the date you accessed it (since information on the web often changes!)

### *A Suggestion*

I will be happy to discuss (or read a first draft of) your paper and give you some preliminary comments by email. Or, you can come by my office hours if you want to “run your paper by me.”

### *Evaluation*

I will provide written comments on your work, and assign two grades for each paper – one for how well your conclusions are presented and supported (in other words, for how convincing your arguments are), the other for how well your writing follows the standards for formal written English. (For instance, how well is the paper subdivided into paragraphs each addressing a particular item in your overall argument? Are the paragraphs arranged in a logical, recognizable sequence? Are the sentences within each paragraph ordered well? Are they grammatically correct? Are there awkward sentences? Are there overly flowery, overly colloquial, or incorrectly-used words or phrases? Is punctuation used correctly? Are there spelling and/or typographical errors?)

### *Topic – Lessons from history?*

We used the famous opening line of the novel *The Go-Between* by L.P. Hartley: “the past is a foreign country; they do things differently there” to introduce some of the mathematics of the ancient civilizations we discussed last semester. How do you think Jared Diamond would react to this point of view? Can the mistaken choices, obliviousness to

signs of problems, and misfortunes that were essentially out of human control that led to past collapses happen again? In fact, might it be said that a lot of the problems of the world today result precisely from the fact that we *do not do things differently* from the ways they were done in the past? Or do you think there are essentially different qualities of our current world cultures as compared to previous civilizations that make it less likely that major collapses lie in our future?