

## Phys 24

### Paper 1

Due at or before the beginning of class, Tuesday Oct. 20

Read and summarize the article entitled “The Last Great Global Warming” by Lee R. Kump from the July 2011 issue of the journal *Scientific American*. This article can be downloaded from the course website in Moodle, along with the *Nature Geosciences* paper by Cui et al. that is discussed in more detail below.

The main goal of your paper is to summarize the Kump article in your own words. This means reading the article several times, looking up words and ideas with which you are not familiar, and making sure you understand what was done and what conclusions were possible. Try to take a critical look at what was reported. What are they basing their conclusions on and how certain can they be about these? Although you may find it useful to check other references to gain some perspective on the work being reported, it is not required that you do so. There is no prescribed length for your paper, but you probably cannot do a good job in less than four double-spaced pages.

You are free to discuss ideas concerning the article with others, but do not discuss possible ways to organize a paper or rationales for deciding what should be included in a paper. While it is perfectly natural for two papers to include isolated instances where similar descriptions appear or identical conclusions are made, it is extremely unlikely that two papers will contain many such instances or have the same overall organization.

The Kump article is fairly conversational in its tone, and narrates a certain amount of the human interest part of the scientific research, e.g. describing his travels. This isn't what I'm looking for you to summarize in your paper; the scientific context, research, and conclusions are the important part. While the main goal is to summarize the work at the level of the Kump article, you should also read a little bit of the Cui article (I'd suggest the abstract and first few paragraphs, the last few paragraphs, and the figure captions) to understand the work in a little more depth than Kump presents. (The Cui article is the technical version of the work that Kump describes in more popular terms.) Understanding the Cui article is challenging, to be sure – it's very technical. But that doesn't mean you can't understand *some* of it. Don't let the fact that you are unable to understand all of it (true for me, too) stand in the way of doing the work of understanding *some* of it and thus understanding the whole issue a bit more.

Acceptable papers will show an understanding and clear explanation of the context, methods, and results of the work presented by Kump. Excellent papers will also

display some additional insight about the details of the work, most likely from the Cui paper.

Keep in mind the College's rules on plagiarism (see Section I.B. under Statement of Student Rights, Responsibilities, and Code of Conduct in the Student Handbook). An excerpt is below, and it sums up the rules succinctly. In short, when in doubt, cite the reference!

*"Fear of being charged with plagiarism need not inhibit anyone from appropriately using another's ideas or data in a piece of writing. Even direct quotation frequently serves as an effective device in developing an argument. Academic honesty requires only that writers properly acknowledge their debts to other authors at least by means of quotation marks, footnotes, and references, if not also with in-text phraseology like "Einstein argued in 1900 that..." or "As Melville implies in Chapter 3 of Moby-Dick...." Such usage is fully within the tradition of forthright academic work."*