

Atmospheric Sciences 211
D.L. Hartmann: Autumn 1999
Research Paper assignment

In this assignment you are to write either a 5-6 page or a 10-12 page typed, double-spaced paper. If you do the 10-page paper you will get writing credit for the class. The intended audience for the paper is a general interest reader like yourself. Your paper should have a beginning point and end point and advance a thesis along the way. You need to choose one of the sources below and let Robb know which one on or **before Friday November 5, 1999**. The paper is **due on the 24th of November**, the Wednesday before the Thanksgiving weekend. This will be marked up by us and returned to you for revision. The paper in final form is due at the last class, Wednesday, December 8, 1999. The papers will be based on books. The books come in two forms: fiction/adventure and science nonfiction. You will get more credit if you take on one of the science references; the science will get you 110% of the points as for fiction/adventure for the same quality of paper. Of course, you may find it easier to write about fiction and adventure than science. Ideally, the book you choose should be one that you have not read before, but this is not a firm requirement. Remember you will need a thesis for your paper, so don't pick something with which you can't find a problem or controversy or point of view. If you want help and advice, consult your professor. Here are the possible sources:

Fiction/Adventure/Nature Books: 100% credit

- Barrett, A., 1998: *The Voyage of the Narwhal: A Novel*. WW Norton Inc, 400p. (Romance novel with real stuff thrown in here and there. A fictional adventure to the Arctic aboard the Narwal. A good read. Moral issues? 20% off at U Bookstore now. \$11.20)
- Bickel, L., 1978: *Mawson's Will*. New York : Avon-Books, Oct. 1978, 237. (Nonfiction story of polar exploration. The incredible journey.)
- Lopez, B.-H., 1988: *Arctic Dreams: Imagination and Desire in a Northern Landscape*. Bantam-Books, Dec. 1988, 464. (The natural history of the Arctic: great if you like animals. Learn all about polar bears, seals and whales. What happens to these critters if we burn all the coal?)
- Lopez, B.-H., 1994: *Of Wolves and Men*. Peter-Smith-Publisher-Incorporated, Jan. 1994, 309. (nonfiction natural history, learn about wolves and men. Boy, aren't you glad there are no wolves left?)
- Nansen, F., 1999: *Farthest North*. Modern-Library, 608. (nonfiction story of attempt to take a wooden boat to the north pole and the incredible journey home.)
- Quinn, D., 1995: *Ishmael*. Bantam-Books, May 1995, 262. (Novel with one main point: What is the point; do you agree; why or why not?)
- Shackleton, E., 1998: *South: A Memoir of the Endurance Voyage*. Carroll-and-Graf-Publishers-Incorporated, Sept. 1998, 380. (Another incredible real-life adventure, trying to reach the South Pole by sea and land. Pass the penguin. Paperback on sale at U Bookstore now. ~\$6)
- Smiley, J., 1988: *The Greenlanders / Jane Smiley*. 1st ed, Knopf : Distributed by Random House,, New York :, xiii, 558 p. :. (Sex and death in a cold climate.)

Science Non-Fiction Books: 110% credit

- Diamond, J.-M., 1999: *Guns, Germs, and Steel: The Fates of Human Societies*. W-W-Norton Incorporated, April 1999, 480. (How did genetics, environment and luck lead to the ascent of the West. Anthropology. A great read. Half price at Amazon!)
- Erlich, P.-R., A.-H. Erlich and G. Daily, 1995: *The Stork and the Plow: The Equity Answer to the Human Dilemma*. Putnam-Publishing-Group-The, Sept. 1995, 384. (They have a value system for you, do you buy it? A lot about population and resource utilization issues.)

- Fagan, B., 1999: *Floods, Famines and Emperors: El Nino and the Fate of Civilizations*. Basic-Books, March 1999, 300. (How weather and climate shaped history. Easy read for non-scientists, but good, if rambling, content. Very new, only seems to be available in hardback for \$25. 30% off at Amazon.)
- Gelbspan, R., 1997: *The Heat Is On: The Climate Crisis, the Cover-Up and the Prescription*. Perseus-Books, 1997, 288. (It's a conspiracy! Global warming!)
- Gore, A., 1993: *The Earth in the Balance: Ecology and the Human Spirit*. N-A-L/Dutton, Jan. 1993, 432. (Hey, I'm not endorsing the guy, but you might want to read his book.)
- Houghton, J. T., 1994: *Global Warming: The Complete Briefing*. Lion Publishing, Oxford, 192. (Just the facts on global warming, please.)
- Imbrie, J. and K. P. Imbrie, 1979: *Ice Ages: Solving the Mystery*. Enslow Publishers, Short Hills, NJ, 224 pp. (the story of the discovery of ice ages and the orbital parameter theory for glaciations. Good read.)
- Lovelock, J. E., 1979: *Gaia, a new look at life on earth / J. E. Lovelock*. Oxford University Press., Oxford ; New York : 157 p. . (Hey, Earth is our mother, and she can take care of herself.)
- Lovelock, J., 1988: *The ages of Gaia : a biography of our living earth / by James Lovelock*. 1st ed, Norton,, New York :, 252 p. .(More mother)
- Philander, S. G., 1998: *Is the Temperature Rising?: The Uncertain Science of Global Warming*. Princeton-University-Press, March 1998, 240.
- Potts, R., 1997: *Humanity's Descent: The Consequences of Ecological Instability*. Avon-Books, May 1997, 325. (More environment and human evolution. Good if you like anthropology. Maybe you don't like environmental determinism.)
- Schneider, S.-H., 1996: *Laboratory Earth: The Planetary Gamble We Can't Afford to Lose*. New York : Basic-Books, Dec. 1996, 192. (This is an authoritative, readable, and succinct account of the global warming problem, including science, economics and politics. I really should have required you to read this. Highly recommended. ~\$10)
- Stanley, S.-M., 1998: *Children of the Ice Age*. W-H-Freeman-and-Company, April 1998, 248. (More environmental determinism for anthropologists. This time the theory that the ice ages were critical in shaping modern humans.)
- Weiner, J., 1994: : *The Beak of the Finch: A Story of Evolution in Our Time*. : Alfred-A-Knopf-Incorporated, May 1994, (Galapagos Finches and El NiNo.)

Structure:

Your paper should take the form of a summary of some aspect of your book that has some relevance to the subject of this course, which is Earth System Science/Climate/Human Society/Nature. Your paper should have a thesis (i.e.point) which you get across using logical or emotional argument. Be convincing. Write about something you feel strongly about, or at least are interested enough in to argue energetically. There is no set format, but make sure your ideas follow logically and in a reasonable sequence so an ignorant person could understand and be entertained.

Grading will be based on all of the following:

- 1) Organization of your thoughts
- 2) Accuracy and choice of your information/ideas. You don't have room to cover everything, so get the most important idea(s) across clearly.
- 3) Writing style. We want a pleasant, clear presentation. Your professor has difficulty concentrating, so keep it interesting and make your points in simple everyday terms.
- 4) Grammar. Write in complete sentences. Use correct spelling and punctuation.

Schedule for completion of the writing assignment.

Friday November 5, Let Robb know in writing what book you have chosen.

Wednesday November 24, Submit your paper for pre-evaluation. Make it good.

Wednesday December 8, Submit final version of paper. Make it perfect.