Global Change
Readings and Assignments

Suggested reference books:

Suggested reference articles:

Many of the articles above are available online through http://www.library.unr.edu/online/ejournals.asp

Suggested reference web sites:
Carbon Dioxide Information Analysis Center: http://cdiac.esd.ornl.gov/
Congressional Research Report on the Kyoto Protocol: http://www.ncseonline.org/NLE/CRSreports/Climate/
DOE Global Change Research: http://www.science.doe.gov/ober/CCRD_top.html
Global Change & Terrestrial Ecosystems: http://gtce.org/
Global Climate Information Programme: http://www.cate.mmu.ac.uk/global.php
Intergovernmental Panel on Climate Change: http://www.ipcc.ch/
United Nations Framework Convention on Climate Change: http://www.unfccc.de/
ASSIGNMENTS
The purpose of these assignments is to consider and discuss if we should implement a policy that reduces the production of greenhouse gasses, and if so, what specific management actions should be made in order to implement this policy in the US.

As in any human endeavor, some uncertainty exists in our ability to predict the future. Thus, predicted changes in global climate may or may not occur to the extent as predicted, and some contend that we do not even have the direction of the change correct. One approach to implementing a policy and its associated management actions is to examine the potential benefits (and detriments) of the policy (and its associated management actions) under various scenarios, i.e. what is the “pay-off” of implementing (or not implementing) the policy/actions given that the future may (or may not) be as predicted and the policy/actions may (or may not) have the desired effect.

Assignment BN #2 – Discussion
Due: Tuesday & Thursday, April 5 & 7, 2005 (15 points)

If desired, team up with 1 or 2 other people in class. Formulate a specific management action that would help implement a policy to reduce greenhouse gasses. Come to class prepared to discuss in 10 minutes:
1. What are the potential benefits and detriments of your management action for the scenario where our climate predictions are correct (i.e. global warming is actually occurring due to increased greenhouse gasses)?
2. What are the potential benefits and detriments of your management action for the scenario where our climate predictions are NOT correct?
3. What are the potential benefits and detriments of NOT implementing your management action for the scenario where our climate predictions are correct?
4. What are the potential benefits and detriments of NOT implementing your management action for the scenario where our climate predictions are NOT correct?
5. Does the “pay-off” from your management action outweigh the “costs”? Be prepared to provide a rationale for your decision.

Assignment BN #3 – Paper
Due: Thursday, April 14, 2005 at 1 PM (25 points)

Each individual student should prepare a discussion paper that formulates 2 specific management actions that would help reduce greenhouse gasses. For each management action, explicitly discuss the 5 questions above. Be sure to discuss the strength of the science behind a policy of reducing greenhouse gasses and its associated management actions. Also, discuss the social, political, and economic factors that would impact the policy decision and its associated management actions as well as how these factors would be affected by the policy/actions.
Undergraduates should have a total of 10 different citations in their paper, and graduate students should have at least 14 different citations. For all students, at least 5 of those citations should be from journals or books.