Labs 9, 10, and 11: Projects and Presentation
GEO 302C
Weeks of April 17, April 24, and May 1

**This lab description covers multiple weeks. See highlighted text for deadlines.**

**Goal:**
Learn in-depth about a subject related to climate (in the past, present, and/or future) that interests you. Complete a project addressing your subject of interest. Teach other students in your section about what you learned and accomplished.

**Step 1 (Lab 9):** Decide on your topic, your project format, and your group.

**Subject of your project**
You may choose any subject that relates to past, present, and/or future climate. See list at the end of this document for suggestions. Note that the list of possible topics is NOT limited to the list provided below.

**Format of your project**
The “default” format is a poster presentation (see http://www.geo.utexas.edu/courses/302C/LABS/PosterPresentation.htm for examples from last year’s class). If you choose to do a poster project, see the guidelines below for how to structure your poster.

Other formats (e.g., movies, music CDs, etc.) are acceptable, provided that your TA approves of your plan. Note that all projects will be judged to the same standard (that is, a group that does a movie will be held to the same standard as a group that does a poster).

**Group composition**
Form small groups of no more than three students. (You may work alone, but keep in mind that “groups” of one will be judged using the same standard as multi-person groups.) Although we encourage you to work with students in your assigned section, you may work with a student(s) enrolled another section, provided that you clear it with your TA. If you work with members of a different section, you must present your work only once, but all group members must be available to attend the section in which your group presents.

**DUE 11:59 PM MONDAY, APRIL 17 FOR ALL SECTIONS:**
Each person should make sure that his or her TA has received an email that contains the following information:

1. The members of your group
2. The subject that you propose to present
3. Two questions that you have regarding your project
4. Two questions that you think that the class should be able to answer after hearing your presentation.
5. The section in which you plan to present.
6. If you want to do a project that is NOT a poster, state this explicitly.

Here is an example email that fulfills all six of the requirements listed above:

To: jackilynnch@mail.utexas.edu
From: gulden@mail.utexas.edu
Cc: clyde_matchange@mail.utexas.edu
Subject: 302C proposed project for Gulden and Matchange

Jacki,

Clyde and I plan to present our project in your Friday 2:00 PM section. I have cc’ed Clyde on this message.

For our project, we would like to look at how art can be used as a source of proxy climate data.

We will do a poster presentation like the ones from last year that are posted on the course website.

Two questions that we have regarding this topic are:
1. How accurate is art as a source of proxy data?
2. How much do climatologists depend on art as a source of climate information?

Two questions that we believe the group should be able to answer after hearing our project presentation are:
1. Does the Little Ice Age appear in 17th-century European art?
2. Can climate variation be observed in southeast Asian art?

Thanks,

Lindsey and Lindsey on behalf of Clyde

Your TA will promptly evaluate your proposed project and redirect you if necessary. Note that your group may be asked to present in another section in order to balance the number of presentations in each section. Your entire Lab 9 grade will be determined by whether or not your TA receives an email linking you to a project subject and group (as outlined above). It is your responsibility to make sure this happens.

Step 2 (Lab 10): After your TA has approved your proposed work, complete your project. Email your TA if you have questions regarding project composition and scope. Note that each group member should play an integral role in the research and composition of the project.

Step 3 (Lab 11): Present your project in section.

You will turn in your project (Lab 10) and present the results of your work (Lab 11) in section the week of April 24th, 2006. During this week, you need only attend the section in which your group presents.

Presentations should be approximately 5 minutes long. Presentations may be no longer than 8 minutes long.
In your presentation you should:
(1) Succinctly, clearly describe what you wanted to learn and/or accomplish when doing your project.
(2) Explain how your project relates to climate and why it is important and interesting.
(3) Explain or show what you learned/accomplished.
(4) Explain how you learned/accomplished it (that is, the steps that you took to reach your goal).

If you’re doing a poster presentation as a project, your poster should be a central part of your presentation.

**All group members should in some way participate in the project presentation.**

**Grading**
- Your Lab 9 grade is ENTIRELY based on whether your TA receives the relevant email by 11:59PM, April 17 (see Step 1 above for more info). You either do it (and receive 100 points), or you don’t (and receive 0 points).
- Your Lab 10 grade is your project grade.
- Your Lab 11 grade is your in-section project presentation grade.

Lab 9 is a completion grade. For both the project itself and the presentation of the poster/project, we will use the following grading system.

- Check plus (100 points): Excellent
- Check (85 points): Good
- Check minus (70 points): Passable

If the poster/project is not completed, you will receive a 0.
If not all students present the project, you will receive a 0. Choose your group wisely.

Your TA may choose to award up to 20 points of extra credit to projects that are deemed exceptional but which are not selected by the class to be the “Best of Section” project presentation.

**Best of Section Awards**
Members of each section will vote for their section’s best project/presentation. Group members may not vote for their own group. The group deemed “Best of Section” will present their work to the entire 302C lecture during the week of May 1st (see below). **Groups chosen to present in lecture will receive 10 percentage points added to their final semester lab grade.** (For example, if your semester-long average score in Lab is 84%, then if your group is selected to present your project in lecture, you will receive a 94% for the Lab portion of your class grade when the final grades for the course are calculated.)

**Week of May 1st, 2006: “Best of Section” presentations in lecture. More information to follow.**
Possible Project Subjects

The choice of potential subjects is *NOT* limited to the ones on the list.

a) Global Warming 
   b) Sea Level Change 
   c) The Ice Ages 
   d) The Little Ice Age 
   e) Abrupt Climate Change 
   f) Climate Modeling 
   g) Nuclear Winter 
   h) Proxy Climate Data 
   i) Cretaceous Climate 
   j) El Nino 
   k) Dust Bowl 
   l) Carbon Balance 
   m) Water Cycle 
   n) Desertification 
   o) Deforestation 
   p) Urbanization 
   q) Kyoto Protocol 
   r) The Day after Tomorrow 
   s) Climate Feedbacks 
   t) Volcanoes and Climate 
   u) Climate Change and Air Quality 
   v) Climate and Groundwater 
   w) Akkadian Empire 
   x) Romans in Brugundy 
   y) Easter Island 
   z) Mammoth extinction in North America 
   aa) Moa extinction in New Zealand 
   bb) Maya (choose a location and a period) 
   cc) Cahokia settlement at American Bottom 
   dd) Spanish Colony of Santa Elena on South Carolina coast 
   ee) British Colony of Jamestown in Virginia
Each poster should contain the following information:

1) Introduction (Why is it important?)
2) Background (What are people doing about it? For example, the scientific background including the local, regional or global climate change context associated with the event.)
3) Findings (Why is it cool? For example, the climatic, social, cultural, and/or economic impact of the specific event(s); any lessons learned from the coincidence of climate change and human history. Scientific/cause and effect; Cultural and historical aspects; Long term impacts or future implications of climate change on human activities.)
4) Conclusions (What should your classmates know?)
5) References (How do you know this? You need a list of at leas 6 references; only three of these may be URLs.)
Poster Presentation Guidelines

The poster design is up to the individual groups but each poster should have the following panels and fit within approximately a **3 ft by 4 ft area**.

- **Title and Authors**
  The title should tell the reader what the poster is about and, if possible, the main finding.

- **Introduction**
  The introduction defines the objective of the poster. It should summarize how you went about achieving your objective, the scientific background including the global/regional climate change context associated with the historical event.

- **Diagrams, illustrations, tables, images, or graphs with captions**
  Four to six figures should be included. The figures should be able to convey your points concisely and clearly but not be overly complicated (i.e., too many graphs or large tables). The captions should describe the figure and its importance for the subject. A reference should be included if the figure or data used to make a figure were taken from the published literature. A **location map** for the particular area covered by the event is highly recommended.

- **Conclusions**
  States what you conclude or recommend form your research analysis. Conclusions or recommendations are based on evidence presented in your poster. Make certain that they follow logically from, and are supported by, the data/results actually presented.

- **References**
  Citations within the body of the poster should be referenced by authors and date. For example, *(Moskowitz and Banerjee, 1979)*. All such references cited in the poster must be included in the final reference list in alphabetical order. A reference style for URLS via the world wide web:


**Resources:**

1) The Walter Geology Library.
2) The World Wide Web. (BUT PLEASE DON’T believe everything you find here!)
3) Popular magazines and newspapers.
4) Other libraries. If you have trouble getting started, talk to the reference librarian about your interests.
5) Be sure to reference your sources.
Acknowledgement: Preparing this lab has benefited greatly from the online materials prepared by Ito, Emi at the University of Minnesota, 2003; see http://www.geo.umn.edu/courses/3002/spring03/poster_new.html.