ES 100 Term Projects and Papers

Paper for Educators

Students working on teacher credentials:

Find 5 Earth Science lesson plans from a peer-reviewed source. They can be found on the Internet, a book, or a teacher, etc., so long as the lesson plan has been peer-reviewed for accuracy. Using both CA standards and National standards for the grade levels you plan to teach, modify each of these lesson plans to fit the format handed out at the beginning of the semester. Incorporate your teaching style, the grade level you plan to teach, how you would make this lesson plan more *inquiry based*. At the beginning of the modified lesson plan, list the standards covered in the lesson plan by number/letter only (do not write the whole standard).

You will also need a section covering each of the following:

- 1. How would you accommodate students with Learning disabilities?
- 2. How would you accommodate students with physical disabilities?
- 3. How does your lesson plan pertain to every day life?

You will find it much easier to teach a concept to your students if you can relate the concept to something in their everyday life: such as evaporation and condensation of water (steam, clouds, and rain), or water spiraling as it goes down a drain (coriolis force).

Please try to cover at least 5 of the concepts we have learned in class, and include references, and a cover page.

Each modified lesson plan should be about 2 pages for a total of approximately 10 pages (Cover page, Table of Contents, and references, <u>**DO NOT**</u> count toward page total).

Check list for lesson plans

- \checkmark Cover page
- \checkmark Table of Contents
- ✓ Your 5 modified lesson plans in proper format with standards sited
- ✓ SDAIE accommodations for disabilities (note one exception California is leaning toward English Emersion, so non-English learners may have up to 30% of the content in their native language, not their whole education).
- ✓ 5 Original Lesson plans attached along with reference pages

Paper for Non-Educators

(Teachers may choose this one as well, but it won't help you in your career!)

For those students not going on to teaching:

Write a 10-page research paper, APA style, covering a topic of your choice that pertains to Earth Science. *Topic must be approved by instructor*. References and cover page required (do not count towards page total).

Presentations: <u>ALL Students must present their work in front of the class!!!</u>

PowerPoint[©] presentation on either a lesson plan or the Earth Science research paper. Approximately 15 - 20 minutes in length. Groups of no more than 4 students (3 - 5) minutes per student). PPT should be an executive summary/abstract of your project. Your classmates (or others in the audience) should come away having learned something about your topic. However, it will not be an in-depth lesson due to the time constraints. But, they should have their curiosity piqued and be able to describe what they might be expected to learn from your lesson plan. Putting it another way, teachers in the audience should be interested in finding out more about your lesson plan and how they could use it in their classroom. Or, think of it this way: This is your chance to sell your lesson plan to the department or school board. But you only have 5 minutes to do it!