

Environmental Chemistry
Final Project Assignment
Specific Expectations

(graded out of 35 points total; worth 35% of final grade)

Lecture (25 points)

I will be evaluating both the lecture itself, and the materials you have prepared (such as lecture notes, handouts, and animations), using the criteria below. (I make this distinction because I know, from personal experience, that a well-prepared lecture may not end up being executed very well! In grading, I will weight the quality of your materials more than how well they are presented.)

- **Clarity:** How understandably do you present facts and explain concepts? How effectively does what you say, write on the board, and display with the data projector convey content?
- **Coherence:** Is it easy to follow the flow of ideas throughout your lecture? How compelling a scientific story do you tell?
- **Chemical Content:** Do you invoke ideas from either general or organic chemistry? (I understand that applied topics may not necessarily draw on this background material as much, but I expect at least some connections with earlier chemistry courses.)
- **Presentation:** How engaging is your lecture? This can be achieved in several ways, such as soliciting questions, answers, or comments from your classmates, telling (relevant) stories, talking about the historical context, doing a demonstration, and showing evocative images and animations.
- **Time Limits:** Do you come to a reasonable stopping point between 45 and 60 minutes?
- **Questions:** How well do you answer them?

I will grade your lecture holistically, assigning points based on this scale:

A = 25, A- = 23, B+ = 20, B = 17, B- = 14

Also note the following:

- I will e-mail you a file with Baird and Cann's graphics for your chapter, and I will post on the course web page a .pdf of Spiro, Purvis-Roberts, and Stigliani's corresponding chapter. (This should help you assemble a PowerPoint file to accompany your lecture.)
- How do you know if you have 45 to 60 minutes of material? And, more generally, how do you prepare to give your lecture? You must practice it, from beginning to end, multiple times! At least one time, you should do a full "dress rehearsal," with your talking, writing on the white board, showing your slides, doing your demonstration, everything! (I still practice almost every lecture I am giving for the first time, and I have been teaching for ten years. Do not think that this level of preparation is superfluous!)

- Your five classmates and I will be doing the assigned reading beforehand, and taking notes during class.

Teaching Materials and Responses (due by December 21) (10 points)

Please turn in all of the material you used for your lecture:

- Your lecture notes, either neatly written or typed.
- Handouts (if any)
- PowerPoint file with images and other information (if any)
- Copies of, or links to, other media (if any)

Also provide the following new material:

- Additional teaching materials in response to at least two questions posed by your classmates and me.
- A typewritten reflection on what you think went well with the lecture, what did not go so well, and what you would change if you were to present the lecture again.

I will grade you holistically on the organization of the material you turn in and on the quality of your new material. I will assign points based on the following scale:

A = 10, A- = 9, B+ = 8, B = 7, B- = 6