Fall Chemistry Extra Credit options: You may complete **only one** of the following options for up to 20 pts of extra credit. Deadline for submission is at the beginning of the fall semester final.

**Option A: Chemistry TED talks.**

Watch one of the chemistry TED talks located at <https://www.ted.com/talks?topics%5B%5D=chemistry> that runs for at least 11 min, or two that run for less than 11 min but their sum must be at least 11 min. For *each* TED talk, prepare a summary and reflection according to the following instructions:

Your Name

1. List the presenter, topic title, topic length and date posted of the lecture and a link to the TED talk. (4 pts)
2. Write a summary of the lecture. (4 pts)

The summary must be between 350 and 500 words long and must be typed (2 pts)

1. Write a personal reflection on the lecture following all of the guidelines below:
2. Identify one important concept, research finding, theory or idea that you learned from this lecture (2 pts)
3. Why do you believe that this concept, research finding, theory or idea is important? (2 pts)
4. Apply what you have learned from this lecture to some aspect of your life. (2 pts)
5. What questions has the lecture raised for you? What are you still wondering about? (the answer "nothing" is prohibited) (2 pts)

The reflection must be between 250 and 300 words long and must be typed. (2 pts)

**Option B: Chemistry Current Event**

Find a newspaper or scientific article dealing with a current event that has to do with Chemistry. The article must be at least 3 paragraphs long in order to use it. After reading the article, prepare a summary and reflection according to the following instructions:

Your Name

1. List the writer, article title, article publication location (NY Times, *Science*, www.sciencedaily.com etc…) and date published. (4 pts)
2. Write a summary of the article. (4 pts)

The summary must be between 350 and 500 words long and must be typed (2 pts)

1. Write a personal reflection on the lecture following all of the guidelines below:
2. Identify one important concept, research finding, theory or idea that you learned from this lecture (2 pts)
3. Why do you believe that this concept, research finding, theory or idea is important? (2 pts)
4. Apply what you have learned from this article to some aspect of your life. (2 pts)
5. What questions has the lecture raised for you? What are you still wondering about? (the answer "nothing" is prohibited) (2 pts)

The reflection must be between 250 and 300 words long and must be typed. (2 pts)

YOU MUST ATTACH THE ORIGINAL ARTICLE TO YOUR PAPER.

**Option C: Chemistry Careers**

Choose one of the chemistry related careers listed here to research. If you want to research a chemistry related career that’s not on this list, first get approval.

Analytical chemist

Biochemist Chemical engineer Chemical plant operator

Research scientist—discovery Research scientist—analytical Research scientist—synthetic

Organic chemist Toxicologist Medicinal chemist

Pharmacist Laboratory technician Veterinary science

Computational chemist Environmental chemist Water management

Nuclear chemist Inorganic chemist Doctor

Teacher Cosmetic chemist Food chemist

Forensic chemist Textile & fabrics chemist Pediatric infectious disease

Create a 3-fold brochure (front and back of one sheet of paper that can be folded into thirds). As you research your career, keep in mind that you must include the following information: (along with anything else you may find interesting about that career) (1 pts for brochure format)

1. Identify your chosen career in large font as a title for your brochure. (1 pts)
2. An informative description of career chosen. (Includes what they do, where they would work and typical salary expectations.) (4 pts)
3. Identify other career opportunities available in that field of chemistry. (2 pts)
4. Provide an appropriate chart, graph, or table that relates to the career. (2 pts)
5. Identify the areas/concepts of chemistry that are important for the career (ex: solutions, stoichiometry, reactions, nuclear, etc…) (2 pts)
6. Provide information on the educational background one would need to pursue the career. (What major would one need, what college courses and or classes must be taken, is a bachelors, masters, or PhD required, etc….) (4 pts)
7. Include at least 2 pictures or graphics. (2 pts)
8. Cite the resources you used, at least 3. (2 pts)

**Option D: Dead Chemists Society**

You have been assigned the ghastly task of inscribing the headstone of a chemist of times past.

Choose a famous chemist to honor with your headstone from [http://famouschemists.org/](http://famouschemists.org/%20) Or honor any chemist from class content. Create a one page headstone that includes:

1. Full name of the chemist (2 pts)
2. Date (years) of birth and death (2 pts)
3. Nationality or Ethnic origin (2 pts)
4. Education or Positions held (2 pts)
5. Personal Life (family, “is survived by” or “father of” or “wife of” etc…) (2 pts)
6. Contributions to Chemistry (at least 2) (2 pts)
7. Illustrations relating to research, work, or awards (2) (2 pts)
8. Picture or caricature (2 pts)
9. Works Cited (at least 3) (2 pts)
10. Your name as the carver of the headstone (2 pts)