**Pet Plant Project – Spring 2017**

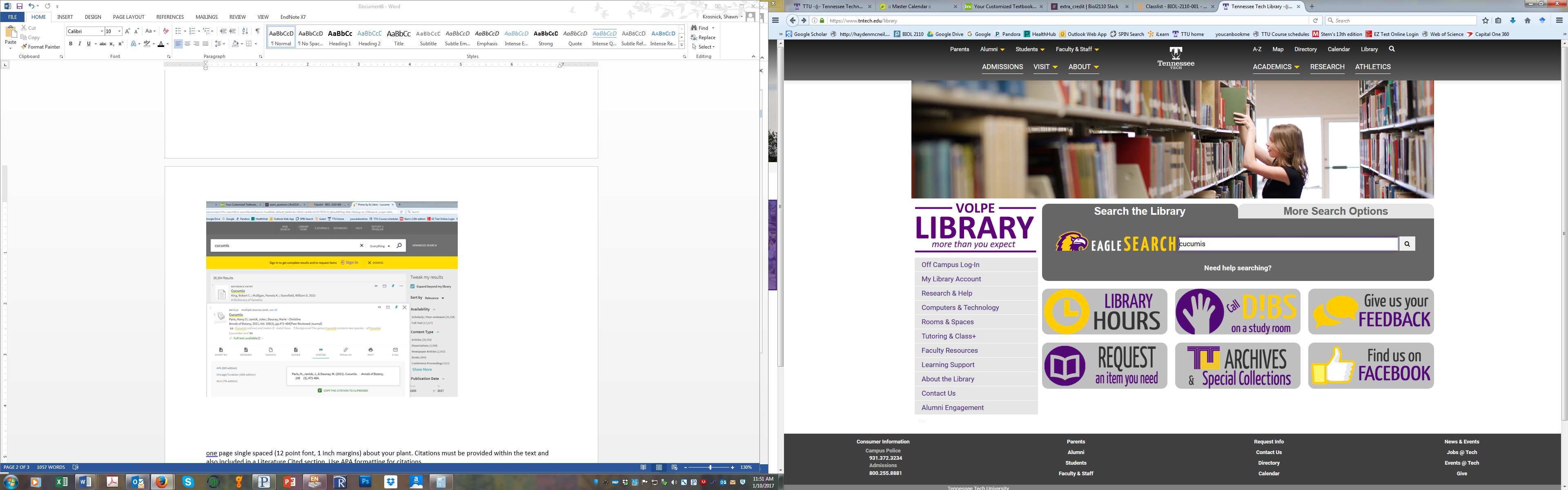
This project is worth 200 points towards your total grade. Your objective is to grow an unknown plant from seed to maturity, learning about plant development, morphology, and physiology along the way. You will be provided with materials during your first laboratory class (seeds, soil, pots, fertilizer, and labels) to begin the project. You will be given 1 (one) seed to grow and observe.

Requirements:

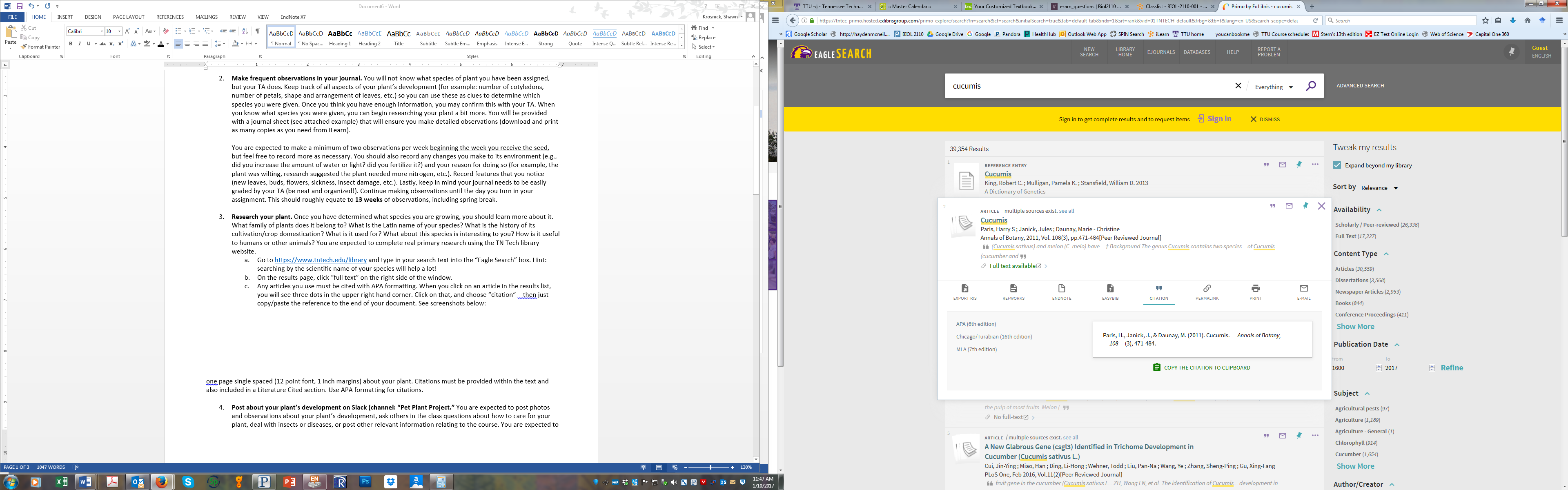
1. **You must keep your plant alive until it reaches maturity.** It is up to you to determine the best way to do that. Research what seeds require to survive (light levels, temperatures, water, etc.) and provide those things to sustain it over the semester. Your plant may (or may not) flower or make fruit during the semester. Flowering is a bonus, but not a requirement. If your plant dies, ask your TA for a new seed and start again. You will not lose points if your plant dies, as long as you keep trying (and hopefully learn from your mistakes!).
2. **Make frequent observations in your journal.** You will not know what species of plant you have been assigned, but your TA does. Keep track of all aspects of your plant’s development (for example: number of cotyledons, number of petals, shape and arrangement of leaves, etc.) so you can use these as clues to determine which species you were given. Once you think you have enough information, you may confirm this with your TA. When you know what species you were given, you can begin researching your plant a bit more. You will be provided with a journal sheet that will ensure you make detailed observations (download and print as many copies as you need from iLearn).

You are expected to make a minimum of two observations per week beginning the week you receive the seed, but feel free to record more as necessary. You should also record any changes you make to its environment (e.g., did you increase the amount of water or light? did you fertilize it?) and your reason for doing so (for example, the plant was wilting, research suggested the plant needed more nitrogen, etc.). Record features that you notice (new leaves, buds, flowers, sickness, insect damage, etc.). Lastly, keep in mind your journal needs to be easily graded by your TA (be neat and organized!). Continue making observations until the day you turn in your assignment. This should roughly equate to **13 weeks** of observations, including spring break.

1. **Post about your plant’s development on Slack (channel: “Pet Plant Project.”)** You are expected to post photos and observations about your plant’s development, ask others in the class questions about how to care for your plant, deal with insects or diseases, or post other relevant information relating to the course. You are expected to be an active participant in the Slack discussions. The exchange of photos, information, and advice among the class is a very important part of this project. Feel free to create your own hashtags
2. **Research your plant.** Once you have determined what species you are growing, you should learn more about it. What family of plants does it belong to? What is the Latin name of your species? What is the history of its cultivation/crop domestication? What is it used for? What about this species is interesting to you? How is it useful to humans or other animals? You are expected to complete real primary research using the TN Tech library website. You will turn in one page single spaced (12 point font, 1 inch margins) essay about your plant. Citations must be provided in a Literature Cited section on the second page.
   1. Go to <https://www.tntech.edu/library> and type in your search text into the “Eagle Search” box. Hint: searching by the scientific name of your species will help a lot!
   2. On the results page, click “full text” on the right side of the window.
   3. Any articles you use must be cited with APA formatting. When you click on an article in the results list, you will see three dots in the upper right hand corner. Click on that, and choose “citation” - then just copy/paste the reference to the end of your document. See screenshots on the following page for directions.



**Results page:**



**4**

**3**

**2**

**1**

Project Grading:

Your project in the last week of laboratory. You must bring in your plant to show the rest of the class. Your TAs and professor will work together to grade the projects during finals week, and you will get your grade at the final exam. Points will be awarded based on how much effort you put into the project. Here is the grading rubric that will be used:

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| **Requirements** | **Details** | **Point Value**  **(maximum values)** |
| Is your plant alive? | Bring your plant to class on the last day of lab. Is it healthy or barely surviving? Did you care for it well? If your plant dies along the way, your journal will document your efforts and will give you partial credit for this section. Thus, it’s very important to keep a detailed journal (see below). | 60 points |
| Background research on your plant | Minimum 1 page, single spaced. Must include in-text citations and literature cited. Warning: do not plagiarize. You will receive a zero if your writing or ideas are not original or you do not cite your sources correctly. You should include: Latin name of species (in italics!), plant family it belongs to, uses of the species, history of domestication, interesting details, etc. | 40 points |
| Journal of your plant’s growth and development | Make note of the following a minimum of twice a week: changes in health, size, new tissues/organs developing, insects/fungus, changes in environmental conditions, fertilizer, or any other features you notice about your plant, along with photos of your plant. | 60 points |
| Slack participation | Did you post photos of your plant? Did you ask questions, interact with other students, and otherwise positively contribute to the “pet plant project” discussion over the semester? | 40 points |