BIOL 197 Lab Project Guidelines

Lab Project: Literature Search, Multimedia Slide Show, and Oral Presentation (50 pts):
Each student must complete a literature search and submit an online oral presentation. You must work with your Lab Instructor, Library personnel (http://sites.csn.edu/library/), and Writing Center personnel (https://www.csn.edu/centers-academic-success) to ensure you prepare a College-level project.

Each student will choose a species (or higher taxon such as Genus) from one of the six Kingdoms of Life that will serve as the focus of the project. Your choice must be approved by your Lab Instructor so that no two students are working on the same topic. You must conduct a literature search of the secondary and primary peer-reviewed literature on the taxon and prepare a multimedia slide show that you will use to give a 12-15 min oral presentation to describe the species (classification, distribution, ecology, etc.) along with a new (preferably within the past 25 yr) medical, industrial, agricultural, and/or environmental application of the taxon. For example, researchers are currently working on how to use proteins in hagfish slime to make fibers stronger than Kevlar fibers. If this was your topic, you would need to provide background information on hagfish (what are they?, where do they live?, how do they fit within the tree of life?, *etc.*) and then explain the new application. When addressing new applications consider the questions that a journalist would ask and report when working on a story (Who?, What?, When?, Where?, How?, and Why?). See the grading rubric for additional details.

Oral presentations must be recorded in Power Point so that your narration corresponds with the bullet points on your slide and the recorded file (.pptx) must be uploaded to Canvas for grading. Various project milestones must be met according to the lab schedule. Your oral presentation must be between 12-15 minutes.

Your Power Point presentation must include at least one image of the focal species, a range map, and two images associated with its application. Include image credits in the figure caption of each image (Image: ©2009 Brian C. Wainscott). Include enough text in each slide to convey your points but not too much that it cannot be easily read by the audience (due to small size and/or extensive amount of text). You must include at least one graphical figure (i.e., a graph) in your slide show. Include all of the necessary parts of a graphical figure and cite the source of the data graphed.

Citations are required in your lab project. You must cite a minimum of 4 primary peer-reviewed sources and a minimum of 2 secondary sources. In-slide citations must include the author's last name followed by the date the article was published (Johnson 2001). If two authors wrote the paper cite both in the text (Jones and Barkley 2011). If three or more authors wrote the article only use the primary author's last name followed by *et al.* in the text (Jackson *et al.* 2003) however, you must include all author names in the literature cited slide listed in the same order as listed in the journal article. Entires in the Literature Cited slide must be alphabetized by the first letter of the first author's last name. Webpage citations must include date accessed and URL. Use the following format: author(s), date, title, journal, volume(issue), page numbers. See the following fictitious example:

Literature Cited

Alfreed, J.H. and B.L. Lancaster. 2009. Kevlar-like fibers made from hagfish slime. Journal of Hagfish 7(2):581-587.

Jones, G., Watkins, J.H., Johnson, K.L., and J.H. Alfreed. 2008. Unique proteins in hagfish slime. Journal of the Hagfish Society 61:171-173.

Walters, J.D. 2010. Induced neuronal differentiation in hagfish stem cells repair spinal cord injuries in mice. Hagfish Embryonica 27:32-52.

University of California, Berkeley. N.D. Introduction to Myxini. Accessed 09sep2016. Retrieved from http://www.ucmp.berkeley.edu/vertebrates/basalfish/myxini.html