## Bio 6994: Technical Communication in Molecular Biotechnology. Winter 2017.

Dr. Robert Arking & Dr. David Njus, Co-Instructors

## **Course Objectives:**

Students should be able to present scientific results and make compelling scientific arguments orally, visually and in written form.

#### **Tutorial Schedule**

- Jan 11 Email to students regarding schedule
- Jan 18 Meeting 1: Prepare a resume (CV) & a job application letter for submission on Feb. 1
  - 2. Prepare an abstract of your research project as will be presented in your poster,
  - 3. Discuss how class will be run
- Feb 1 (no class). 1. Submit your completed CV, letter, and abstract to other students for their critical review of your writing.
  - 2. Send copies of the above to Drs Arking and Njus for their review.
  - 3. Work on presenting a standard size poster of your research abstract as well as a short one minute summary of your work and a longer five minute description of your project. The short one is for viewers in a hurry, the other is for people really interested in your work. Your goal is to impress both types with the novelty or scientific rigor of your approach and/or with the interesting aspects of your findings. If you do not yet have actual data for any part of the presentation, then present the results predicted by your hypothesis but be sure to visible label the data as "projected but not actual".
- Feb 8 Meeting 1. Return each other's writings along with your written critical review and suggestions.

  Rewrite your CV/letter/abstract in view of the critiques you have received.
  - 2. Send copies of the above to Drs Arking and Njus for their review.
  - 3. "How to present accurately & without boring your audience. How not to lie with statistics and graphs". Informal lecture by Dr. Arking
- March 1 Meeting: Present posters to Drs Arking and Njus
- March 8 (no class). 1 Submit manuscripts of your work to each other for review and critique.
  - 2. Submit your critiques to each other by March 15.
- March 29 (no class): Submit manuscripts to Drs Arking and Njus for their review
- April 19 Meeting: Present oral presentation with slides (15 minutes only) to Drs Arking and Njus for their review. Your ability to answer questions from the floor will be noted.

### References:

Tufte: CognitiveStyle of Powerpoint, 2nd ed., Graphics Press 2006

Morgan & Whitener, "Speakig about Science: A Manual for Creating Clear Presentations", Cambridge Univ Press, 2006.

Alley, "The Craft of Scientific Presentations", Springer-Verlag, 2003

# **Grading:**

CV & job letter	10%
Abstract	10%
Poster	25%
Manuscript	25%
Oral Presentation	30%
Total	100%

Note: All presentations will be reworked until each student achieves at least a B grade on each one, Each of you will critiques everyone else's presentations as this will give you practice in objective criticism and editing.