

Scientific & Professional Skills in Biology

BIOL 500 – Fall 2008 – Sonoma State University

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Office Hours: Wednesdays 2:30-3:15p, Thursdays 2:30-3:30p (others by appointment)

Seminar: Thursdays 5:00 – 7:00p

Seminar Objectives: This seminar is designed for all graduate students in SSU's Biology Graduate Program, *regardless of their area of emphasis or stage in the program*. Its primary objective is to help students develop their skills in a variety of areas that are critical for success in our graduate program as well as the scientific and professional arenas. We will emphasize general skills that all scientists must possess to be effective in their fields. We will also explore various approaches that graduate students can employ to position themselves for the academic and professional worlds that await them after their tenure at Sonoma State.

In no particular order, some of the topics that we are likely to explore in this seminar include the following: 1) mechanics of and styles in scientific writing (thesis proposals, theses, grant proposals and journal manuscripts); 2) general aspects of project design, hypothesis testing and data analysis; 3) research funding opportunities for graduate students; 4) data presentation in graphical and tabular form; 5) seminar presentation techniques and the effective use of PowerPoint; 6) strategies for success in teaching; and 7) planning for post-SSU educational and professional opportunities (resumes/CVs, job applications, cover letters and interviewing skills).

Format & Expectations: The course will be structured in a seminar format and require that each student be highly motivated and engaged. Each student will be required to 1) actively and constructively participate in all discussions; 2) critique and discuss all assigned readings; 3) generate a resume/CV and job application cover letter; 4) present a 15-20 minute seminar using PowerPoint on completed or proposed research; and 5) generate a short research proposal to a prospective funding agency. Other assignments may arise during the semester but my desire is that this class will be illuminating but not a lot of work for participating students.

Evaluation: Grades will be based on the level of participation in discussions and the quality of work on assignments.