

BIOL 492: SEMINARS IN BIOLOGICAL SCIENCES – FALL 2009

Instructor: Dr. Ailsie McEnteggart

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Office: Holt 205 Office Hours: M-F 1:30-2:30 pm.

Course Goals:

The primary goal of this course is to expose you to current research and issues in biological sciences. Students are expected to demonstrate: a) understanding of experimental design, b) ability to analyze presented data c) good writing skills. Listening to researchers talk about subjects they find fascinating may also inspire you to consider research as a career.

Course Requirements:

1. Attend at least 10 of the 12 seminars available this semester. Seminars begin at 4:00 p.m. on Friday in Holt 170 and conclude at the end of the question period. Coffee and refreshments, thanks to Omicron, will be available at 3:30 p.m. in Holt 171 or as listed. Occasionally, there will be extra seminars available during the week; these will be announced. There will be an attendance sheet at the front of Holt 170 that you must sign. If you arrive late, *don't forget to sign in* following the seminar.
2. For each required seminars you attend, you must write a paper with the following components and format. The numbering system will allow me to read your paper more efficiently and thus return it to you sooner.

Your name

Name of seminar speaker

Title of seminar

Date of seminar

A. Seminar synopsis – a 1-2 page summary of the seminar

For a **research seminar** this will include:

- 1) A description of the question the researcher is asking and why this question is important
- 2) A statement of the researcher's hypothesis, if there was one
- 3) A description of the experimental design, if they did an experiment
- 4) A summary of the experimental results
- 5) A summary of the presenter's conclusions

For a **topical seminar** (a seminar on some issue such as global warming, etc., but not one describing experimental data) this will include:

- 1) A description of the issue the speaker is addressing
- 2) Why this issue is important
- 3) A statement of the researcher's solution to the problem, if there is one
- 4) A summary of the evidence supporting the speaker's view of the issue
- 5) A summary of the presenter's conclusions

B. Reflections – 2-3 sentences indicating what you think is the significance of the work presented.

C. Questions (2) you would like to ask the author about the work/research/issue presented. These must be questions of a biological nature that stem from the work presented. (“How did you get interested in this research?” and “What is the next experiment you will perform?” are unacceptable.)

D. Summarize your overall opinion of the seminar. Statements such as “The speaker did a good job” or “This was the best seminar all semester, I really enjoyed it” are unacceptable. Do you agree with the speaker's conclusions? Do you think their data provide an adequate way of addressing their question? Indicate any notable strengths or weaknesses of the presentation. If you cite a weakness, how do you think it could be corrected?

Grading: Credit / No credit

Papers must follow the outline above (A-D), be typed and double-spaced. They will be graded + or - on clarity, grammar, spelling, completeness (sections a-d), accuracy, and neatness. A paper will receive a – if there is a major omission (one of the parts above is not present), if there is a major inaccuracy (a key point of the talk is incorrect) or an excessive number of small inaccuracies or if the grammar and/or spelling is full of mistakes..

- Each paper is due Monday following the seminar by 5 pm.
- Papers will be submitted as email attachments to me (amcenteggart@csuchico.edu).
- *Please use a file name that is your last name and then either a word from the seminar title or the date.*
- **Late papers will not be accepted without prior approval (you must have a good reason and make your request before the due date).**
- I will return your papers by email by the following Friday (if all goes well).

To receive credit in this class you must receive a + on all papers. A paper that receives a – must be re-written to receive credit. Re-written papers are due by the next Monday.

IMPORTANT NOTE: Most speakers will not clearly articulate all of the points in the outline above. You will have to listen carefully, and reflect on what you've heard before you fill in the outline. This may require using your background knowledge to “fill in” some of the gaps in what is presented. One of the goals of this course is to provide an opportunity for you to think carefully about contemporary biological research and articulate those thoughts on paper. You are encouraged and expected to ask questions of the speakers for clarification.

IMPORTANT NOTE 2: Although you have several days to write the paper, notes that are crystal clear on Friday evening frequently turn into incomprehensible mud by Monday. Either take very good notes, or write the paper early. If the speaker assumes that you know some background information that you have never heard of, thereby making much of the talk incomprehensible for you, do some research.

IMPORTANT NOTE 3: If you plan to skip a seminar just to skip it, do so after you have your 10 done. There is not much space for skipping in the schedule.

IMPORTANT NOTE 4: Check the course web page – from time to time new or useful information is posted there. And if you lose your syllabus or schedule of seminars, they are posted there also.