

**BIOLOGY SEMINAR SYLLABUS (BIO 391 AND 491)
Fall, 2012**

Instructors: Dr. H. Neval Erturk
Dr. Edna J. Steele

Class Meetings: Fridays at 2:00-3:50, Phifer 103.

Course Overview: As Biology majors, you are required to enroll in Biology 391, Junior Seminar, and Biology 491, Senior Seminar. The classes are taught concurrently each Fall Semester, meeting on Friday from 2:00 to 3:50 pm. If enrollment requires, additional meetings are added or the seminar will meet beyond the allotted time.

Typically, there will be two student presentations each meeting followed by a literature discussion. Presentations will be open to the public, and they will be evaluated by all attendees. Juniors and Seniors meet together for presentations, but separately for discussions.

All Biology 391 and 491 students are required to attend all presentations and their respective discussions.

In all email correspondence about Seminar, please include "BIO391" or "BIO 491" in the subject line.

Seminar Assignments

1. Attendance and participation at all seminar presentations and literature discussions.
2. Writing and submission of a paper and a revised paper on the topic you were assigned.
3. Presentation on the topic you were assigned.
4. Critique by the writing center of your paper.
5. Discussion with a faculty member outside the biology department on your topic. Note that this is very informal and should be done before your formal presentation.
6. (seniors only) Writing and submission of a paper on the discussion topic.

GRADING

Biology 391, Junior Seminar

Manuscript	42%
Seminar Presentation	42%
Participation	6%
Discussion	10%

Biology 491, Senior Seminar

Manuscript	28%
Seminar Presentation	28%
Senior Paper	28%
Participation	6%
Discussion	10%

Letter Ranges:

A: 95-100%; A-: 90-94%
 B+: 87-89%; 84-86%; 80-83%
 C+: 77-79%; 74-78%; 70-73%
 D+: 67-69%; 64-67%; 60-63%
 F: below 60%

Attendance Policy

Missed Classes, and Late Assignments: Excused absences are granted for official college activities and for emergencies. Other absences are unexcused. Unexcused late assignments will lose 10% plus an additional 10% for each day late. 10% is equivalent to a single letter grade.

Assignments may be turned in late with no penalty only for emergencies. College activities that require you to miss class are planned in advance, and you should be prepared to turn in your assignments by the due date, even if you are absent.

Turning in Late Assignments: A hard copy of all assignments must be submitted by the due date. In addition, an electronic copy for our file must be submitted via moodle by the due date in a format that can be opened and read. If it is a document that cannot be opened, it is not turned in yet.

The instructors will only grade the hard copy. You should turn them in to each of the professors as soon as possible for it to be graded. The hard copy must be identical to the electronic document in all aspects. Electronic submissions are required for filing, for accurate record of the time of submission, and as back up source in case documents are lost.

Making up Missed Seminars Your attendance is an important part of seminar, and it is figured into your grade. However, we do understand that there are some occasions in which you may need to miss a seminar. Excused absences for seminar include official college activities (athletic or music events) that overlap with class time and emergencies in your *immediate* family. All other absences are unexcused, unless the faculty excuses you.

All absences, regardless of whether they are excused, must be made-up. To make up a seminar absence, you need to

- (1) Watch the tape of all the seminar presentation(s) for that week.
- (2) Write a 1- to 2-page review of each presentation, double-spaced, that describes the topic and main points of the seminar and gives your own criticism.
- (3) Read any papers for literature discussion.
- (4) Write a 2- to 3-page review of the paper. The review should outline the problem or issue the authors presented, summarize their methods, findings, and conclusions, and give your own analysis of the issue.
- (5) Turn all of these items in (electronic and hard copy) by the Friday following the seminar you missed.
- (6) Hard copies of all make up assignments must be turned in to Dr. Erturk.

Paper and Presentation Information

For Juniors and Seniors

Seminar Topics

You should have already received your paper and presentation topic last Spring. You will do research, write a manuscript, and make presentation to the class on your topic. Starting to prepare your material as early as possible (during the summer) will greatly improve the quality of your work.

The paper you write should give both a broad overview of your topic and explore it in depth. It is your choice how you focus your paper within the topic. It should explore modern research, including molecular, cellular, and genetic mechanisms, whenever appropriate. You should give up-to-date information along with your own interpretations and criticisms. The paper should be reflective, rather than just reporting. Your paper may include figures or illustrations, which are not counted as part of the paper length.

Manuscript Guidelines

Format: Times New Romans or Calibri, 12 font, double spacing, 1 inch margin on all sides.

Topic: Although your topic is assigned, many of the topics are broad enough that you can focus your paper in a variety of ways. You will not be able to cover the entire topic fully. Instead, you should find a good focus and theme to organize your paper around. Make it interesting and logical. Be a critical and thoughtful thinker, evaluator, and writer of the science that you are reading. Your coverage of the topic must be appropriate for an upper-level biology major.

Audience: Write for an audience that is composed of well-rounded biology seniors and recent graduates.

Length: Must be 7-10 pages in length of text. A title page or title section, reference page or reference section, and figures inserted in the paper do not count as pages. Number your pages.

References: You must have at least 10 references. At least 4 references must come from scientific journals. Review journals, such as *Science News*, *Discover*, *Scientific American*, and *American Scientist* do not count as scientific journals. The biology professors can help you determine whether something is appropriate or not. The remainder of your sources may come from advanced textbooks, journal articles, review journals, or other sources. No more than 4 may come from sources that are entirely online, and you should be wary of these. You may find some sources from the internet that are also in print. Usually these will count as print articles, rather than URL's. Do not use Wikipedia as a reference. Anyone can change entries on Wikipedia.

Do not base your entire paper on a single reference with your other sources just filling in gaps.

You can use Interlibrary Loan (ILL) through the Converse library to order articles and books that we don't have. They will usually arrive within 2 weeks.

Although you may find some good information in encyclopedia and introductory textbooks, they really won't give the depth that you need for your paper. Use them only for background information in the same way you would use Wikipedia.

Citing Sources and Reference Section: Use the name-year (**N-Y**) based CBE (Council of Biology Editors) citation style (http://www.umes.edu/fdl/cbe_style.htm)

Write well!!!! This is an important paper for you. Remember what you have learned about creating papers that are interesting and logical, using expository writing, good style, and appropriate grammar.

Do not plagiarize!!!! The source of any information that didn't come from your experiments, analysis, or original thinking must be cited correctly. Actual quotations must be in quotation marks, and **quotations must be kept to a minimum**; use them only when the specific way the original author said something is important. Otherwise, use your own words, but you still must cite the author(s) of the idea. You should be familiar with information on documentation found in (1) your Student Handbook, (2) the college catalog, and (3) current CBE format.

What to submit, and when it is due

Annotated Bibliography (see instructions in a separate handout):

Juniors: August 31

Final Paper:

Seniors: August 31

Juniors: September 7

You must have the final paper critiqued by the Writing Center (in the library) before you turn it in. You will meet with the faculty 2 weeks before your presentation for feedback on your final paper (be sure to schedule an appointment with the faculty ahead of time). Your graded manuscript will be returned to you so you can revise it.

Revised Final Paper:

Seniors: Sep 14 (1 week prior to presentation)

Juniors: 1 week prior to presentation (see Master schedule)

You will turn in your revised final paper along with the graded final paper **one week before your presentation**, and it will be graded. Your total manuscript grade will be the average of the grades on the final draft and the revised final draft.

Late papers will be graded down one letter grade for each day late (e.g., a B+ goes to a C+ in one day), including Saturday and Sunday. If the Final Paper is late, it may not be graded in time for you to make suggested corrections on your Revised Final Paper (still due one week before seminar). If you do not turn in one of your papers, it will be graded as an F, which will be averaged with the grade on the paper you do turn in. Your papers will not be considered to be turned in until we have both copies that are readable.

You should turn in both a hard copy and an electronic copy (via Moodle) of each paper to each faculty member. Title the electronic documents as follows: BIO391LastNameFinal and BIO491LastNameRevisedFinal.

Presentation Guidelines

All students are required to attend all presentations.

Length: Your presentation should be 25 minutes long. It will be followed by 5-7 minutes of questions and discussion from the audience and comments from the professors.

Format: You will give your presentation using PowerPoint. We assume that you know how to build a PowerPoint presentation. If you need help, the Biology faculty members may help you to structure your presentation, but we cannot teach you how to use PowerPoint or build your presentation for you.

Audience: Keep in mind that the audience is composed of upper-level biology students. Do not assume that everyone has taken all the classes that you have or that they know all the terminology that you know. We (even the professors) will need some background. At the same time, do not focus your presentation so much on background information that you never get to the main material in any depth.

Questions and answers: The purposes of the questions are to clarify confusing parts of the talk, to stimulate discussions, to find out how much you know and what thoughts you have about your subject. Questioners are trying to learn from you; they are not trying to destroy you. It is acceptable to admit that you do not know the answer to a question, but also you should have enough background to hypothesize an answer. You can make the question and answer session more enjoyable when you know more than you present in the talk and anticipate questions may come up in the audience's minds. If you can do this, you can have some answers thought out. You should also expect the questioners to tell you if you have made any grave mistakes in your understanding of materials or if there are topics you should have investigated but did not.

Presentation Critique: After your presentation, the professors will discuss the positive and negative aspects of it in front of the class. As with the question/answer session, this is meant to be a learning opportunity for you and your classmates.

Presentation tips:

Approach this as a professional presentation. This is an important part of your career at Converse. Fortunately, you are in front of friends.

Use Dr. J's 1-3-5 rule. 1 slide per minute; maximum of 3 points per slide; maximum of 5 words per point. Okay, this isn't always practical, and you cannot do it all the time, but you should shoot for it. Make your slides sketchy, and fill in the details as you speak.

Take the time to describe each illustration. Don't assume that we recognize the images, and don't forget to use the pointer.

Do not apologize for a bad illustration. Simply do not show it. Be certain all visuals can be seen and read from the back of the room.

Your goal should be to teach your audience (both students and faculty) about your topic. You know what you learned, we don't. Be clear, to the point, and thorough.

Organize your talk well, and communicate well with your audience.

Don't read your notes or your slides. Instead, use your slides as a guide and support for your talk. If you absolutely need a written support, bring a very short "starter" note for each slide.

Do not copy and paste information websites, literature, etc. onto your slides. This is plagiarism. If you get images from web sources, be sure you cite them on the slide.

Practice, then practice again, and after that, practice a few more times. Do your practices out loud, not just in your head. Initially practice in front of the computer screen. This will show you what slides need to be reorganized, added, or eliminated. Practice in the presentation room with your visual materials. Practice with a variety of audiences: a bunch of friends, yourself in the mirror, another bunch of friends. Ask your practice audiences to be merciless but constructive. Tell them that they are doing you no favors by saying it sounds great when it doesn't, and remember that they are doing you a great favor. Give your presentation to your roommate and friends several days before you present it to the class. Have them give you very harsh criticisms. They may want to let your flaws slide, but your professors won't.

Do not start with "OK" or "Let's get started," but rather by thanking the person who introduced you and the audience for coming. It is not necessary to give your name, class, and title since the person who introduced you will have already given them. Instead of finishing with just a big silence or "That's it," try to finish with concluding statements that summarize or wrap up what you have said. If this is not possible, simply thank the audience again and ask if there are any questions.

Look and act professional. Dress nicely and professionally; be confident and comfortable. Do not giggle, do not blow your hair, and do not send little signals to your friends. Make lots of eye contact from side to side and front to back in the room. Try to change your tone of voice during your talk. Be animated, and show that your topic is interesting to you. Your topic truly is exciting. Convince the audience.

Non- scientist discussion: As part of your presentation grade, you are required to discuss your seminar topic intelligently with a non- scientist one-on-one before your presentation. The purpose of this part of the seminar is to show that you understand your topic well enough to communicate it with a variety of people, not just scientists. This is to be an informal discussion, not your presentation. Be sure that your evaluator understands this.

Eligible non-scientists are faculty members at Converse who are not in the natural science related fields AND who have been approved by the biology faculty. There will be a list of pre-approved evaluators on Dr. Steele's door. Please sign up opposite the name of the evaluator (first come, first served) and then ask the evaluator if he/she will be willing to evaluate your seminar. If he/she is not available, you must find another evaluator. Each evaluator must only be used once to avoid abusing the kindness of outside evaluators so please sign up first before asking the evaluator. Please do not ask people to evaluate you if they have already evaluated someone else. When you meet with your evaluator, you will give him/ her a form that he/she will use to report back, confidentially, to Dr. Steele.

Seminar presentation and manuscript time-line. Please see master schedule for deadlines!

Note: Your paper must be checked by the writing center at least once.

7-2 days before presentation date:

Build your oral presentation and practice, practice, practice. Professors may be able to help you outline and structure your presentation if you ask for help.

Do your non-scientist evaluation.

Presentation Date: Give your presentation and HAVE FUN doing it!!!!

Day afterwards: Relax. You deserve it.

Learning Disabilities: Students with documented disabilities who would like to request academic accommodations must contact the Director of Academic Accommodations and Tutoring Services at 577-2028 (extension 2028 on campus).

Literature Discussions and Senior Papers

Juniors

In addition to the seminar presentation and manuscript, those of you in Biology 391 are required to participate in a discussion that will be held during seminar meeting times. On discussion weeks, one or two students will lead a discussion of an assigned article. All articles will be made available to students (either on reserve in the library or online) one week prior to the discussion. All juniors are expected to have read the “article of the week” and to participate in the discussion, regardless of who is the discussion leader.

Seniors

In addition to the seminar manuscript and presentation, those of you who are seniors in Biology 491 will have literature discussions all based on a specific topic in biology. Working *together as a group*, you will discuss research on the topic chosen by the professor. This part of the seminar will consist of discussions led by you, on papers chosen by you, and each of you will write a paper on this topic individually.

The discussion papers will all be primary literature, and each paper will be discussed by the entire group. Students will lead the discussion. You must choose your paper by at least one week before your discussion, and it must be approved by the faculty facilitator.

Senior Papers: These are papers in which you will explore and review the discussion topic. The papers are to be professionally written, and to focus on a single theme within the topic. Your paper should integrate different parts of the topic to synthesize a common idea. The paper should show strong evidence of critical, intellectual thinking on your part. It should be written with an audience of senior biology students. You will receive specific information on this paper, and it will be graded by the professor who facilitates the discussion.

Both Seniors and Juniors are required to complete a Discussion Check List of the journal article for the week. An electronic copy of blank Check List will be available to you. Literature Check Lists are due Thursdays by noon. You must submit a copy to each professor.