

Senior Seminar - 21226 - BIOL 4900 - B (Spring Semester 2011)

1. Course Information

- Course number and section: BIOL 4900 (section: B)
- Course name: Senior Seminar
- Hours of credit: 1
- Pre-requisites or co-requisites as listed in university catalogue: Completion of all required courses in the senior curriculum for the biology major.
- Classroom location and room number: R 2:00 – 3:50 p.m. in BC 1025, R 4:00 – 4:50 p.m. in Student Union Theater
- Department, College, University: Department of Biology, College of Arts and Sciences, Valdosta State University

2. Instructor Information

- Instructor name: Dr. Jonghoon Kang
- Instructor contact: BSC 2084, 229-333-7140, jkang@valdosta.edu
- Instructor office hours: MTW 8:30am – 9:30am

3. Course Description

- Course description as printed in university catalogue: Completion of all required courses in the senior curriculum for the biology major. Grade: Satisfactory (S) or Unsatisfactory (U). The capstone course in biology. Students are required to attend outside lectures chosen by the instructor. This course assesses students' ability to research independently topics in biology, assimilate the information, and disseminate the information in an organized and understandable fashion in both written and oral forms. Besides demonstrating comprehension of their topic and competence in communication skills, students take the ETS Major Field test in biology and complete the departmental Senior Exit Questionnaire for successful completion of the course [from Dr. Goddard's syllabus].

4. Standards, Goals, Objectives, or Outcomes

- outcomes:

The General Education Outcomes

(<http://www.valdosta.edu/academic/VSUGeneralEducationOutcomes.shtml>).

4. Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening. They will display the ability to write coherently in standard English; to speak well; to read, to understand, and to interpret the content of written materials in various disciplines; and to listen effectively and to understand different modes of communication.

7. Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written and visual materials. They will be skilled in inquiry, logical reasoning, and critical analysis.

They will be able to acquire and evaluate relevant information, analyze arguments, synthesize facts and information, and offer logical arguments leading to creative solutions to problems.

The departmental educational outcomes (listed in the university catalogue).

1. Develop and test hypotheses, collect and analyze data, and present the results and conclusions in both written and oral formats used in peer-reviewed journals and at scientific meetings.

- Course objectives or outcomes [Goddard]:

To assess students ability to independently research topics in biology, assimilate the information, and then to disseminate the information in an organized and understandable fashion in both written and oral forms

To administer and evaluate students' satisfactory completion of the ETS Major Field Test in biology and completion of the departmental Senior Exit Questionnaire

5. Assignments (explicitly aligned with the goals, objectives, or outcomes)

- General description of the assignments:
 - Outline for term paper (due by Feb 3rd, 10 pt)
 - Oral Presentation (40 pt)
 - Written Research Paper (due by 10 March, 40 pt)
 - Completion of the Major Fields Test in Biology with a score of 140 or higher.
 - Completion of the Senior Exit Questionnaire
 - Attendance at all scheduled class meetings
 - Attendance of and submission of completed evaluation forms for all science seminars (You can have two excused or unexcused absence from the seminar).

Major Field Test. The ETS Major Field Test is a comprehensive, standardized test designed to evaluate the student's general knowledge in the sub-disciplines of biology. The test scores will be used to evaluate the effectiveness of the department's curriculum, and VSU's scores will be compared to the national average to identify possible weak areas in our curriculum. Thus, students should take the test seriously and make every effort to excel on it. Completion of the ETS Major Field Test with a score of 140 or higher is a course requirement, and students who fail to complete the ETS Major Field Test will receive a grade of unsatisfactory for the course.

Each individual student is responsible for contacting the **VSU Testing Office** (Powell Hall-West, First Floor, Room 1120; Telephone **229-245-3878**) and arranging a time to take the ETS Major Field Test in Biology. Students must complete the Major Field Test by Thursday, 3 February 2011. A fee is assessed to take the Major Field Test. The Biology Department will pay the fee for each student to take the test once. Students who fail to score at least 140 on the test must re-take it until a score of 140 is achieved. The student will bear the cost for any re-taking of the Major Field Test [modified from Goddard].

Science Seminar Series. Attendance and completion of an evaluation form is required for all seminars in the Science Seminar Series with two cases of absence. Normally these seminars are held Thursdays at 4:00 PM in the Student Union Theater. The schedule with time, date and venue may be found at the following Internet address: <http://www.valdosta.edu/cas/scisem/>. *Evaluation forms will be passed out by the instructor at the entrance to the Student Union Theater up until 4:00 p.m. Any student not in attendance prior to 4:00 p.m. will be considered absent. In order for the student to receive credit for attending a science seminar, it is the student's responsibility to see the instructor immediately after each seminar and submit her/his signed, completed evaluation form [Goddard].*

Plagiarism [modified from Goddard]

Plagiarism has become an increasing problem on University campuses. Plagiarism is the representation of someone else's work as your own. You may not blatantly copy phrases, paragraphs, or ideas from another's work. You cannot paraphrase someone else's ideas and use them as your own. You must analyze all data and work by others and then integrate this information with new data and conclusions that you independently synthesize, properly citing past work that supports your conclusions.

Students should read and be familiar with the Biology Department policy on plagiarism:

<http://www.valdosta.edu/biology/documents/biologyplagiarism.doc> and read and understand the University policy on Academic Integrity:

<http://www.valdosta.edu/academic/AcademicHonestyPoliciesandProcedures.shtml>.

Additionally, there have been many articles written on what is plagiarism and I refer students to the one referenced here and published in the Chronicle of Higher Education.

McLemee, Scott. 2004. What is plagiarism? *The Chronicle of Higher Education* 51(17); A9.

<http://chronicle.com/article/What-Is-Plagiarism-/6962>

Any act of plagiarism in the student presentation of the written paper will result in a failing grade for the term paper and therefore, this course.

It is imperative that the term paper be the student's own original work. Plagiarism will not be tolerated, and any student caught plagiarizing shall receive a failing grade on the term paper resulting in a grade of unsatisfactory in the course. Please be forewarned that various web search engines will be used to check for plagiarism, as well as SafeAssign (see below).

Use of SafeAssign: By taking this course, you agree that all required course work may be subject to submission for textual similarity review to SafeAssign, a tool within BlazeView. For more information on the use of SafeAssign at VSU, see SafeAssign for Students [Goddard]

(<http://www.valdosta.edu/academic/SafeAssignforStudents.shtml>).

Oral presentations:

Format: powerpoint-based (Bring your presentation in a PC compatible memory stick (jump drive))

Time: 12 min presentation + 3 min question/answer

I think seven to nine slides for the presentation is reasonable.

Outline: The format of the outline of research paper will be posted on the Blazeview. Outline of Research Paper (*Limit the outline in one page. It will be evaluated on the basis of clarity and logic in the statements. Complete it by typing and submit it to Dr. Kang as a hard copy by Feb 3rd.*)

- Policies for missed assignments, make-up assignments, late assignments, and/or extra credit: If you miss any assignment due to medical or family-related emergency you can have make-up assignments as long as you prove the valid reason of your absence (doctor's notes). Otherwise no make-up assignments! And you will get zero point for the missing part.

Detailed information for individual assignments may be provided separately.

Course Theme: Let's study about Dr. Kang's research.

1. Aptamers
2. Heparin-Protein Interactions
3. Heparin-(Bacterial) Cell Interactions
4. Thermodynamics in Biology
5. Immunology
6. Other topics with approval of instructor

6. Assessment or Evaluation Policy

Grading:

Outline of Research Paper	10 pts
Written Research Paper	40 pts
Discussion/Participation	10 pts (one question in science seminar or two questions in student seminar)
Oral Presentation	40 pts
Total:	100 pts.

Deductions to grade:

Plagiarism found in paper – automatic zero for paper	
Each absence from a scheduled class	-10 pts
Each absence from the science seminar series (w/ two exceptions maximum)	-10 pts
Failure to complete the MFT with a 140 or higher	-40 pts
Failure to complete the senior exit questionnaire	-20 pts
Late papers/outlines/scheduled talks (each occurrence/day)	-10 pts

This class is graded Satisfactory/Unsatisfactory. Your final grade must be equal to, or higher than 70 to receive a satisfactory grade [Goddard].

- Grading standards: If you can't make any of the assignments due to medical or family-related emergency you will get zero point unless you prove the valid reason of your absence (doctors' note).

7. Schedule of Activities or Assignments, including university -scheduled final exam time (all schedule is tentative and may be subject to change)

week	Date	Science Seminar	Class / Deadline
1	1/13	None	Introduction / Select Topics
2	1/20	To Infinity and Beyond	Library Research / Sign up for Major Field Test Due (Rebecca Taylor)
3	1/27	Prospective memory performance and very mild dementia: A signature decline	Demonstration / senior exit questionnaire (-20 pt)
4	2/3	Enthalpy-Entropy Compensation in Biological and Chemical Processes by your professor	Outline due (10 pt)/ COMPLETION OF MAJOR FIELDS TEST (-40 pt)/ Order of Presentations
5	2/10	TBA	Final Approval of Topics (INDIVIDUAL CHECKING) / Student Research, No Class
6	2/17	Dr. John M. Ruter University of Georgia	Student Research, No Class
7	2/24	Using Insect Systems to Study How Organisms Interact with Beneficial and Harmful Microbes	Student Research, No Class
8	3/3	Impacts of predators on estuarine foundation species across environmental gradients (Mid-term 10/7)	Student Research, No Class
9	3/10	Charles Craig, Georgia Bio President Hosting Dept: Biology	Written Research Paper Due (40 pt) Class starts at 3pm.
10	3/17	Spring Break	Spring Break
11	3/24	TBA	5 Student Presentations
12	3/31	TBA	5 Student Presentations
13	4/7	TBA	5 Student Presentations
14	4/14	TBA	5 Student Presentations
15	4/21	Dr. Erik Johnson, Department of Biology Wake Forest University	5 Student Presentations
16	4/28	None	7 Student Presentations

8. Classroom Policies

- Attendance and tardiness: Any absence policy should conform to the university policy. University Attendance Policy from the VSU catalogue:
“The University expects that all students shall regularly attend all scheduled class meetings held for instruction or examination. When students are to be absent from class, they should immediately contact the instructor. ***A student who misses more than 20% of the scheduled classes of a course will be subject to receive a failing grade in the course.***”
- Accommodations Statement:
From VSU’s Access Office <http://www.valdosta.edu/access/facresources.shtml>):
“Students requesting classroom accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in Farber Hall. The phone numbers are 245-2498 (V/VP) and 219-1348 (TTY). “
- Classroom demeanor or conduct: Every student should make the lecture a comfortable and enjoyable learning experience. Late entry to the class room or leaving early is bad behavior. Common sense should be practiced and expected.
- Communication: All VSU-related correspondence should be conducted via VSU email addresses for both student and instructor and via the Blazeview.

9. Additional Information (at instructor’s discretion)

Additional Instructions for Seminar Talk Presentation [modified from Dr. Goddard’s syllabus]

1. Talks are expected to be professional in nature.
 - a) Delivered on assigned date
 - b) Organized
 - c) Well spoken (adequate volume, elocution)
 - d) Practiced
 - e) Succinct
 - f) Demonstrate a clear mastery and understanding of the topic and relevant biology
2. Talks should last about 12 with an additional 3 minutes allowed at the end for questions and discussions.
3. Talks should be prepared using PowerPoint
Note: PowerPoint allows for vast amounts of graphic design for presentation slides. Good graphics matter only in so far as they actually contribute to the clarity of the presentation. Please do not waste huge amounts of your time on meaningless, computer graphic tricks assuming they will generate a better grade.
4. Talks should be well organized summaries of:
 - a) Introduction of the topic
 - b) Explanation of the biology/ interest/ problem
 - c) Discussion of the technical aspects of the science and methods used to study the question
 - d) Discussion of what the data drawn from these methodologies are
 - e) Conclusions drawn from the data - what do the data mean?
 - f) Your opinions and /or projections based upon your research.
5. If any reference material is directly cited, citations should be included on the relevant slide (This includes ‘borrowed’ graphics! Be sure to give credit where credit is due.

6. You are expected to be practiced and ready to deliver your seminar on the date assigned. Very limited exceptions may be made. There are no free seminar dates available. If you miss your own seminar, you will receive a zero and it cannot be made-up.

Additional Instructions for Paper Presentation

1. Choose a topic from the list provided, or, suggest one of your own for approval by the instructor. Choose a topic, or some aspect of that topic, which can be reasonably and thoroughly discussed in the confines of this assignment.
2. Research that topic well in the literature. Note that information content is critical. Specific, detailed and well-understood information to support your thesis is required.
 - a) Each paper should have a title page. It should contain only: Paper title, authors name, course name and number, and a summary abstract. Abstracts are limited to no more than 150 words.
 - b) **Text:**

Papers can contain the following sections identified by headings: Introduction, Discussion, Conclusions, and References. Additional subheadings pertaining to content may be added.
 - c) Each paper should be well supported by references. References must be cited in text where appropriate and listed in correct format, in alphabetical order, in the reference section of the paper. The number of references should be five to eight.
 - i) **References MUST come from professional, peer reviewed, primary research or secondary review sources.**
 - ii) **References MAY NOT be web pages.** You may use the web to search data bases and find appropriate, original literature. You may use the internet to find and download original, full text articles. You may use Galileo to locate abstracts and citations.
 - iii) Any references cited simply as web pages will be discounted from the grade – heavily – with few exceptions.
3. Paper texts should be at least 4 double spaced, pages in length (including the abstract and title pages). Try to limit them to a maximum of 5 pages. Text must be in standard fonts (Times New Roman, Arial, or Calibri) and have an 11 point font size. One inch margins are required.
 - a) Paper length does NOT include references, they are an extra requirement.
 - b) Paper length does NOT include figures. If figures are used, each figure must be on its own page and have an appropriate figure caption on separate pages.
 - c) Papers must be well written.
 - i) Correct English is required
 - ii) Correct punctuation is required
 - iii) Clear, readable, understandable, complete sentences are required.
 - iv) Bulleted or numbered lists are generally not allowed
 - v) **If quotations are used, they must be short and to the point and they must be appropriately cited. Absolutely only one quotation will be acceptable; more will indicate a failure by the student to adequately synthesize the information and report on it.**
 - vi) Acts of plagiarism will be detected using SafeAssign and other methods. **Any act of plagiarism will result in the paper being rejected and receiving a grade of zero.** Do not cut and paste text from web sources or other student papers. This is ridiculously easy to detect, prove and potentially may result in dismissal from the university.
4. Text might follow the "*Guide for Authors*" provided from *Molecular Immunology*. See http://www.elsevier.com/wps/find/journaldescription.cws_home/253/authorinstructions.