VALDOSTA STATE UNIVERSITY Biology 4900—Senior Seminar Spring 2012

INSTRUCTOR: Dr. J. A. NIENOW

OFFICE: 2089 Biology/Chemistry Building; 249-4844

Office hours: Wednesdays—2:00-3:30, Thursdays—9:00-10:30, Fridays—12:00-

1:00, or by appointment EMAIL: jnienow@valdosta.edu

Course Objective (from the Undergraduate Catalog): "The capstone course in biology. This course assesses students' abilities to research independently topics in biology, assimilate the information, and disseminate the information in an organized and understandable fashion in both oral and written forms. Besides demonstrating comprehension of their topic and competence in communication skill, students take the ETS Major Field test in biology and complete the Senior Exit Questionnaire for successful course completion."

Pre or co-requisites: Completion of all courses in the senior curriculum for the biology major.

Course requirements: In order to pass this course with a Satisfactory (S), you will need to complete **all** of the following:

- a minimum score of 140 on the Major Fields Test (GEO 5; BEO 2-5)
- a 30-minute PowerPoint presentation that is understandable by your classmates, is in your own words and that demonstrates your understanding of the material (GEO 3, GEO 4, GEO 5, GEO 7; BEO 1))
- a review paper on your articles that is well-written, well-referenced, understandable by your classmates, is in your own words and that demonstrates your understanding of the material (GEO 4, GEO 5, GEO 7; BEO 1)
- attendance at at least 80% of class and Science Seminar

Plagiarism will absolutely not be tolerated! Copying of text, whether intentional or not, from your sources will result in failure of the course. You must be diligent in citing all of your reference and you must avoid taking someone else's words, even if you quote them. A paper full of quotes does not demonstrate understanding and will result in failure of the course. Paraphrasing does not mean changing a word or two. The best way to ensure that you do not plagiarize is to read the material, then step away from it for a day or two, and then begin writing. This method also allows you to gauge your understanding of the material.

PowerPoint presentation and paper: Your PowerPoint presentation should be focused on a research article, preferably the one selected at the beginning of the course. In addition it must in include:

- thorough background on the system
- the biological questions that the authors are addressing
- the methods that the authors use to answer the questions
- the results of the experiments and interpretations of the experiments

To get a satisfactory grade you must

- look at all the data and walk the audience through the data; do not merely accept the authors' interpretations without critical analysis
- include appropriate figures and appropriate text font
- explain your presentation, not read your presentation; reading of your presentation does not demonstrate understanding

Review paper: Your review paper must meet the following criteria

- it must be in review format (like a term paper) and should not have methods, results or discussion sections since this is not your work; see other review articles as a guide
- it must be thorough and complete, double-spaced, 12 pt font
- the length of the paper and the number of references is dependent on the topic; however papers significantly less than 2000 words based on fewer than 6 references will be automatically deemed unsatisfactory
- references must include at least one review article and at least 4 research articles in addition to the one at the focus of your presentation
- it should be spell-checked (don't let spell-check auto-correct scientific terms), grammar-checked and very well-edited by yourself and others
- references should be to peer-reviewed articles, review articles by experts in the field, books or book chapters by experts in the field, accepted text references for general information; avoid newspaper articles and websites (you may use these to assist your understanding but do not depend on them for accurate information)
- use Inter Library Loan!; do not limit your articles to free ones or you will have a very incomplete story
- references should include authors (only use *et al.* if there are more than five authors), title, year published, journal, volume, page numbers

Your paper is due on the day of your presentation. You must submit a folder containing your PowerPoint slides, your paper and copies of all references used.

Proposed Schedule

Note: Some of the dates may be changed to accommodate your instructor's research.

Attend class regularly.

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1/11	Introduction to the course					
1/12	no seminar scheduled					
1/18	Topic and paper approval					
1/19	Seminar—Dr. G. Bielmyer: TBA					
1/25	work on papers					
1/26	Seminar—Dr. Mondor: The good, the bad, and the downright nasty: Microhabitat preferences of carrion-infesting Diptera					
2/01	Major fields test—details to follow					
2/02	Seminar—Dr. J. A. Velez Maruland: TBA					
2/08	work on papers					
2/09	Seminar—Dr. W. Crampton: Reproductive Character Displacement in Neotropical Electric Fishes					
2/15	work on papers					
2/16	Seminar—Dr. C. Anderson: TBA					
2/22	Student presentations: 1. 2. 3.					
2/23	Seminar—Dr. A. Noss: TBA					
2/29	Student presentations (alternate date): 1. 2. 3.					
3/01	Seminar—TBA					
3/07	Student presentations: 4. 5. 6.					
3/08	Seminar—TBA					
3/14	SPRING BREAKNO CLASS					
3/16	SPRING BREAKNO SEMINAR					
3/21	Student presentations: 7. 8. 9.					
3/22	Seminar—Dr. M. Grosell: TBA					

3/28	Student presentations: 10. 11. 12.					
3/29	Seminar—Dr. A. Saatchi: From Parthian Batteries to Li ion Batteries					
4/04	Student presentations: 13. 14. 15.					
4/05	Seminar—TBA					
4/11	Student presentations: 16. 17. 18.					
4/12	Seminar—TBA					
4/18	Presentation make–up day 1. 2. 3.					
4/19	Seminar—TBA					
4/25	Student presentations: 19. 20. 21.					
4-26	Presentation make-up day 1. 2.					