

**VALDOSTA STATE UNIVERSITY**  
**Biology 4900—Senior Seminar**  
**Spring 2014 – Sections A & B**

INSTRUCTOR: Dr. J. A. NIENOW

OFFICE: 2089 Biology/Chemistry Building; 249-4844

Office hours: Mondays & Wednesdays 2:30 to 3:30, Tuesdays 2:00 to 3:00, or  
by appointment

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**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 meetings

**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, step away from it for a day or two, and then begin writing without looking at the original references. This method also allows you to gauge your understanding of the material.

**Review paper:** Your review paper must meet the following criteria

- it must be on topic
  - o **Senior seminar this semester will revolve around environmental issues. Many of these issues are unresolved. Your review should examine the issue objectively and come to a conclusion based on the evidence presented.**

- 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 5 research articles
- 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

**Copies of your references are due the week of February 10, 2014**

**Your paper is due the week of March 10, 2014.**

**PowerPoint presentation:** Your PowerPoint presentation should be focused on a single research article, selected by you and your instructor from the references in your review paper. It must 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