Meeting rooms: Thursday 2-3:50 BSC 222; Thursday 4-4:50 Powell Hall Auditorium
Instructor: Dr. Mark Blackmore
Office: BSC 2218
Office Hours: Office Hours: M, W, Th, F 1:30-2:30 or by appointment
Required texts: J. Diamond “Guns, Germs and Steel;” E. Wilson “Biophilia”

Pre- or Co-requisites: Completion of all required courses in the senior curriculum for the biology major. (0-3-1)
Course Description: “The capstone course in biology. Students are required to attend outside lectures chosen by the instructor. This course assesses the student’s 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 course completion.” (From VSU Catalogue)

This course addresses the following learning outcomes: “Students will express themselves clearly, logically, and precisely in writing and in speaking, and they will demonstrate competence in reading and listening.” (VSU General Education Outcome 4) “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.” (Biology Department Educational Outcome 1)

The seminar is intended to assess a student’s abilities to investigate, analyze and summarize an area of current biological knowledge and to communicate that knowledge to peers. Each student will select a topic approved by the instructor. Using resources from the library, interlibrary loan, and the Internet, the student will research information on the selected topic, organize it into a written paper and present it in the form of a lecture to the class. Demonstrated comprehension of topic and competence in oral and written communication skills are required to satisfactorily meet the course requirements. Oral and written skill will be graded equally. To successfully complete the course, students are required to attend all scheduled Science Seminars ( http://www.valdosta.edu/colleges/arts-sciences/science-seminars/2014-spring/ ); take the ETS Major Field test in biology and score at least 140; participate in class discussions, and complete the department Senior Exit Questionnaire. Details regarding grading are provided below. Grade: Satisfactory (S) ≥ 70% of points or Unsatisfactory (U) <70%

ATTENDENCE AND CLASS PARTICIPATION: Students are expected to attend all scheduled class meetings and Science Seminars; any student who cannot attend one or more sessions should discuss this with the instructor prior to the absence. It is expected that all members of the class will participate in class discussions. Come prepared to ask meaningful questions, critique the quality of the material presented and raise meaningful issues related to the topics discussed.

COURSE GRADE: Student performance is graded “satisfactory” or “unsatisfactory.” Student performance must meet or exceed all of the following requirements to receive a “satisfactory” grade:

1. No more than two unexcused absences
2. Minimum score of 140 on the Major Fields Test
3. Complete the Senior Exit Questionnaire
4. Earn at least 70% of points for the following
   - Review paper (40 pt)
   - Oral presentation (30 pt)
   - Science seminar critique (10 pt)
   - Review paper outline & references (10 pt)
   - Participation (participate in class discussion, asking questions during Science Seminar or student presentations (10 pt)
Format of the Written Paper
This document may not exceed 15 double-spaced, typed pages (12 point font), excluding figures, tables and bibliography. The following format should be used:

1. Main body of the paper
   A. Introduce the topic
   B. Present concepts and theories relevant to the topic
   C. Define key terms
   D. Present basic information gained by past research on the topic
   E. Discuss experimental procedures involved in gaining information on the topic
   F. Discuss controversial issues and changes (if any) in how this topic is perceived
   G. Present past and current research work on this topic

   The main body of the paper may be organized in any way that is appropriate. You can use an historical approach, present basic theory with supporting research results or focus on controversy and dissent associated with competing ideas. The way in which the paper is written depends largely on the student’s perspective of the topic. If there are any questions, please consult the instructor before starting to write.

   When researching information, use review articles, books, government publications and professional journals which provide research results central to the topic examined. The Literature Cited section (see below) must include AT LEAST 10 references (more is better) appropriately cited in the body of the manuscript; at least 7 of these references must be scientific articles from peer-reviewed journals.

2. Summary
   The summary should briefly restate the major points in the body of the paper and not present any new information. It should not exceed two paragraphs in length. No references should be cited in the summary. The summary is, in a sense, the equivalent of the abstract of a research paper.

3. Literature Cited
   All sources of information used in the paper should be cited. In the body of the paper citations should follow either of the following formats:

   Johnson (1995) found that *Bufo valiceps* eggs were tolerant to 3 ppt NaCl for up to eight days.

   *Bufo valiceps* eggs were tolerant to 3 ppt NaCl for up to eight days (Johnson 1995).

   References in the literature cited section should be listed in the same format as in the journal “Emerging Infectious Diseases.”

The Oral Presentation
Each student will be assigned a half-hour time slot to present the results of their research in spoken and audio-visual format to the class and any visitors. It should be prepared using PowerPoint and illustrated to Presentations must be 20 - 25 minutes in length plus 5 -10 minutes for questions from the class. The talk should present the information found in the written paper but the paper may not be read to the class. This presentation should be extemporaneouss or presented from memory or with the aid of index cards. This presentation need not follow that of the written paper exactly: the oral presentation may be better presented in a different format. Speakers are reminded to talk at a moderate pace (neither too fast nor too slow), and to speak clearly.

Special notes to students:
To protect the privacy of each student, grades will not be posted at any time nor will they be revealed over the telephone. Students are advised to consult the VSU Undergraduate Bulletin and the 2013-2014 Catalogue and the Spring 2014 Schedule of Classes for information regarding VSU policies, procedure and dates regarding registration, drop/add and withdrawal.
**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 schedule the Major Field Test by September 26th, 2013. 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. For more information on the Major Field Test in Biology please refer to the ETS website. (http://www.ets.org/mft/about/content/biology). A photocopy of your ETS major field test score must be submitted to the instructor.

**Academic Honesty Policy:** Cheating, plagiarism (submitting another person's material as one's own, or doing work for another person which will receive academic credit) are all impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an assignment or exam, the unauthorized copying of examinations, assignments, reports, or term papers, or the presentation of unacknowledged material as if it were your own work. Students are responsible for knowing, understanding and complying with the VSU Student Code of Conduct, in Appendix A of the Student Handbook (http://www.valdosta.edu/stulife/handbook/).

If substantial evidence exists for a violation of this policy, the student(s) involved will receive a grade of 'U' for the course and an official record will be filed following the Academic Integrity Response along with a letter to the Dean of Students (http://www.valdosta.edu/academic/AcademicHonestyPoliciesandProcedures.shtml).

Students are required to read and sign the Department of Biology’s Plagiarism Policy. http://ww2.valdosta.edu/biology/documents/PlagiarismPolicy.pdf

In addition, students must complete the plagiarism tutorial by Aug 23 online at http://www.lib.usm.edu/legacy/plag/plagiarismtutorial.php

**TurnItIn:** By taking this course, you agree that all required course work may be subject to submission for textual similarity review to Turnitin, a tool within BlazeVIEW. For more information on the use of Turnitin at VSU see Turnitin for Students.

**Special needs:** 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).