

**INSTRUCTORS:** Dr. D. Vaden, Ph.D.  
E.E. O'Banion Science Building, Biology Department, Suite 430E  
Prairie View A&M University, Prairie View, TX 77446  
Telephone: (936) 261-3163 email: See ecourse (formerly WebCT) email

**OFFICE HOURS:** Monday. (2PM - 4PM) or by appointment

**LECTURE:**

BIOL 1123 E. E. O'Banion Science Bldg., Rm. A101

**COURSE DESCRIPTION:** BIOL 1123. College Biology (3–0) Credit 3 semester hours. Ecosystem: A reflection of the interdependence of plants on animals and how man's existence is dependent on successful interactions between plants and animals. (BIOL 1307)

The science of biology covers every aspect of plant and animal life and their interaction. The ecosystem is a reflection of the interdependence of plant on animal and how man's existence is dependent on successful interactions between plants and animals. Environmental quality is largely dependent on interactions of plants and animals. Man's existence on earth is imparted by the life forms of his particular ecosystem. A knowledge of the significant roles played by each group of organisms is essential to man and his quality of life. Our foods, medicines, clothing, and shelter are all products of our environment. Knowledge of the structural components of the ecosystem is essential because man must learn to manage his activities in order that his use of the resources of ecosystem will become positive and not continue to be destructive. Man must learn to live with the plants and other animals in the ecosystem. This course should develop a greater appreciation for ecosystem structure and lead to more effective use and management of resources and more effective conservation practices while we continue to line in this spectacular ecosystem.

**TEXT:**

Environmental Science: Problems, Connections and Solutions, 12th Edition  
G. Tyler Miller & Scott Spoolman ISBN-10: 0-495-38337-6, ISBN-13: 9 78-0-495-38337-6 © 2008 Paperbound

**\*Students are required to read the textbook.**

**COURSE GOALS:**

1. Become familiar with the basic concepts, language and practices of environmental science.
2. Develop a greater appreciation for ecosystem structure.
3. Understand how more effective use and management of resources and more effective conservation practices benefits the ecosystem.
4. Understand and explore the impact of humans on the environment, resources, pollution, the ecosystem, etc., including current events.

**COURSE OBJECTIVES**

Upon completing BIOL 1123, the student will demonstrate the following competencies:

- \* Describe fundamental ecosystem concepts and discuss current issues impacting environmental science.
- \* Develop and apply critical thinking skills to scientific inquiry
- \* Demonstrate the ability to effectively communicate environmental science topics in a written report
- \* Analyze and interpret empirical and quantitative data
- \* Demonstrate the ability to engage in productive teamwork

**PROCEDURE**

This course is a lecture oriented course that is web-assisted. Ecourse assessments/quizzes are implemented and a portion of the total grade. The lectures will consist of giving information and discussions that are designed to clarify concepts being discussed. Students should read assigned material before class in order that they may participate in the discussions. Questions will be entertained as they are asked by student and those asked by the teacher as. Man is importance in each topic will be discussed as the course proceeds.

**COURSE EVALUATION METHODS:**

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

**Exams** – There will be approximately five multiple choice tests designed to measure scientific knowledge of presented course material and application of critical thinking, empirical and quantitative skills.

**In-Class Assignments** – Class assignments are designed to supplement and reinforce course material by using critical thinking and written communication skills. In-class assignments will also incorporate the analysis and interpretation of empirical and quantitative data. For group activities, students will work in small groups to demonstrate productive teamwork by exhibiting the ability to work effectively with others to support a shared goal and consider different points of view.

**Ecourse Quizzes** – Weekly web (ecourse) based quizzes designed to measure ability to apply critical thinking, empirical and quantitative skills to presented course material. There will be > fifteen ecourse quizzes given during the semester. These will consist of a combination of objectives and discussion items. The ecourse quiz schedule (availability and due dates) will be available in the ecourse calendar.

**Written Report** – Students will demonstrate written communication and critical thinking skills by writing a “Science in the News” Report. Students will find one recent news article about a subject related to the material in this course from a reputable newspaper, magazine, or web news source. The article must cover a topic that is related to the subject matter of BIOL 1123. Students will search for articles using key vocabulary from the class lectures and assignments. The report will be graded on the appropriateness of the topic, content, organization, tone, sentence structure, word choice, writing mechanics, conclusion, reference quality, citation format and length of the report. The grading rubric, criteria for selection of article, and other important details about the written “Science in the News” report will be available on the BIOL 1123 ecourse site.

### Grading Matrix

Grades will be determined by performance on a regular basis. Your grade will be based on a total of 100 points. Course grades are determined from total point accumulation at the end of the semester, as follows:

<b><u>Class Assignments</u></b>	<b>50 pts. (50%)</b>
Weekly Web-based Quizzes (> 15)	
In-Class Assignments	
- Written assignments	
- Teamwork (Group) Activities	
<b><u>Exams &amp; Report</u></b>	<b>50 pts. (50%)</b>
5 Exams	
1 Written report	
<b>Total</b>	<b>100 pts. (100%)</b>
<b><u>GRADING SCALE</u></b>	90-100=A; 80-89=B; 70-79=C; 60-69=D; Below 60=F

### Tentative Class Schedule

Week 1	Chapter 1 Environmental Problems, Their Causes, and Sustainability
Week 2	Chapter 2 Science, Matter, and Energy
Week 3	Chapter 3 Ecosystems: What Are They and How Do They Work Ecourse Quiz
Week 4	<b>EXAM I</b> Chapter 8 Sustaining Biodiversity: The Ecosystem Approach
Week 5	Chapter 4 Evolution and Biodiversity
Week 6	<b>EXAM II</b> Chapter 5 Climate and Biodiversity <b>Group Activity –Interpreting Climate Graphs</b>
Week 7	Chapter 15 Air pollution Chapter 16 Climate Change and Ozone Loss
Week 8	<b>EXAM IV</b> Chapter 7 Applying Population Ecology: The Human Population
Week 9	Chapter 14 Risk, Toxicology, and Human Health
Week 10	<b>EXAM V</b> Chapter 11 Water and Water Pollution
Week 11	Chapter 17 Solid and Hazardous Waste <b>Group Activity - A Case Study on the Scientific Method: PCBs in the Last Frontier</b>
Week 12	Chapter 13 Energy
Week 13	Chapter 13 Energy
Week 14	Chapter 18 Environmental Economics, Politics, and Worldviews
Week 15	<b>“Science in the News” Written Report</b> <b>College Biology II Final Exam</b> <b>**ALL STUDENTS ARE REQUIRED TO TAKE THE FINAL EXAM, Fri., May 3, 10:30AM – 12:30PM**</b>

### COURSE PROCEDURE

Examinations: At least five major exams will be given during the semester. Exam questions will be multiple choice. Use ParSCORE scan-trons only. All exams are equally weighted. The final examination is always given at the end of each semester. The schedule for the final examination is set by the university administration. Please read the **class schedule booklet** used during registration to

obtain final examination schedule. Do not schedule any activity during the final exam period in this class. All students are required to take the final exam. There will be no excused absences or makeup for the final exam. The final exam is not cumulative.

MAKE-UP EXAMS: Students are strongly advised to take all exams at the scheduled time. Plan and schedule your activities so that you can be present to take all exams at the scheduled time. One exam will be dropped if the student takes all the scheduled exam.

**Students with non-valid or non-official excuses for missing an exam will earn a grade of zero (0) for the missed exam.** Students may request a make-up exam for one that was missed. However, the instructor will schedule the time and place of the make-up exam which will not interrupt the teaching of the class or delay the complete coverage of the course topics. Students who are scheduled for the make-up exam and miss it will not be provided a second opportunity to take an exam for the original exam that was missed. **If a student has missed one exam due to undocumented illness or emergency, you will be able to take a 100 question cumulative (covering all chapters) exam on the day that the final exam is administered.** The cumulative exam is available to all students.

#### UNIVERSITY AND COURSE RULES AND PROCEDURES

1. **STUDENT CLASS ATTENDANCE POLICY:** The University Attendance Policy requires students to be present for each scheduled class. Students with or without official excuses for missing class will be tested and evaluated the same as students who attend class. However, students attending class will have the advantage of being taught knowledgeable information which they are expected to know. Students are responsible for materials covered during their absences. Classes will start at the prescribed time and end at the prescribed time. Absences are accumulated beginning with the first day of class. The University catalog provides more detailed information.
2. **ACADEMIC MISCONDUCT:** (Students caught cheating will receive a grade of F for the course. Students are prohibited from participation in acts of academic dishonesty, including tampering with records or falsifying admissions or other information. Disciplinary action will be taken against any student who alone or with others engages in any act of academic fraud or deceit. The undergraduate catalog provides more detailed information. It is the responsibility of students and faculty members to maintain academic integrity at the University by refusing to participate in or tolerate academic dishonesty. Reports must be the work of the individual student. Evidence of copying your work from others, including the world wide net, is cheating. Students should read the section on Offenses and Appropriate Disciplinary Actions in the current PVAMU website catalog.
3. **NONACADEMIC MISCONDUCT** (See Student Handbook): The University respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Forms of academic dishonesty:

1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
3. Fabrication: use of invented information or falsified research.
4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one's own work also constitutes plagiarism.
4. **SEXUAL MISCONDUCT** (See Student Handbook): Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.
5. **PLEASE DO NOT BRING FOOD OR DRINKS INTO THE CLASSROOM.**
6. **ELECTRONICS:** Cellular phones, I-Pods, Palm pilots, CD players, Radios, Cameras, Lab top Computers and other sorts of high technology communication instruments are not allowed during any part of lectures and exams unless specified. They are instruments of cheating. They must be turned off and locked so that they can not be seen or used. Students that are caught using these or any other instruments used to cheat, will be charged with cheating and therefore earn a failing grade of zero and F.
7. **DISABILITIES:** The office of Disability Services is located in Evans Hall, room 315 or call (936) 261-3585. This office is responsible for achieving and maintaining program accessibility for all students who self-identify as having an officially documented disability (Rehabilitation Act, Section 504 and Americans with Disability Act) If you have a disability, please inform me so that I can assist you to get "reasonable accommodation" related to the disability. ADA Statement: Students with disabilities who believe they may need adjustment in this class are encouraged to contact the Office of Disabilities Services at (936) 261-3585 as soon as possible. Once you receive a letter of adjustment from the office, please make an appointment with instructor to discuss adjustments for this class.

8. **STUDENT ACADEMIC APPEALS PROCESS:** Authority and responsibility for assigning grades to students rest with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.