

**COURSE SYLLABUS**  
**COLLEGE BIOLOGY                      BIOL 1113**

Jan 14, 2013 - May 11, 2013

Prairie View A&M University

Department of Biology

College of Arts and Sciences

<u>COURSE NAME</u>	<u>COURSE #</u>	<u>Section #</u>	<u>CRN:</u>	<u>TIME</u>	<u>DAYS</u>	<u>ROOM</u>
College Biology	1113					

<b>INSTRUCTORS:</b>	Dr. D. Vaden
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<b>E-MAIL</b>	use ecourse mail
<b>OFFICE:</b>	E. E. O'Bannion Science Building 430E
<b>OFFICE HOURS:</b>	Monday (2PM-4PM) or by appointment
<b>SNAIL MAIL (U.S. Postal Service)</b>	P.O. Box 519; MS 2210                      E.E. O'Banion Science Bldg, 430E                      Prairie View, TX 77446

**COURSE DESCRIPTION**

Credit 3 semester hours. Introductory course for non-biology majors. Emphasis on basic biological principles and their application to human life. Contemporary biology that covers the chemical basis of life, structure and function of the cell, molecular biology and genetics.

Co-requisite: BIOL 1111. \*\* (BIOL 1306)

**TEXTBOOK:**

College Biology   Bio 1113   Prairie View A&M   Custom Edition (in PVAMU bookstore)  
Authors: Cecie Starr, Christine Evers, Lisa Starr (\$98.25 – new, \$73.75 – used)  
Publisher: Brooks/Cole- Thomson Learning  
**ISBN-13:** 978-1-285-38880-9 | **ISBN-10:** 1-285-38880-1 | Chapters 1-15 | Loose Leaf  
  
Biology: Concepts and Applications, 8th Edition, 2011  
Authors: Cecie Starr, Christine Evers, Lisa Starr  
Publisher: Brooks/Cole- Thomson Learning  
**ISBN-10:** 0-538-49389-5 | **ISBN-13:** 978-0538-49389-5 | Chapters 1-44; 864 Pages| Loose Leaf

**Supplementary Learning Materials**

The textbook is the only book required for this course. However, students can purchase additional supplemental text content materials if they so desire. Students are strongly encouraged to read the textbook and if supplementary resources are needed, the library has an enormous amount of material.

**Access to Learning Resources:**

PVAMU Library: phone: (936) 261-1500; web: <http://www.tamu.edu/pvamu/library/>

University Bookstore: phone: (936) 261-1990; web: <https://www.bkstr.com/Home/10001-10734-1?demoKey=d>

**COURSE GOALS**

The goal of this course is to

1. demonstrate an understanding of the fundamental concepts of biological principles.
2. understand and appreciation for the scientific method and its applications to problem solving.
3. develop an awareness of the unity and diversity of life, and to develop an understanding of the mechanisms for the identification of living organisms.
4. stimulate students to become intellectually self-reliant, and to enhance their aesthetic appreciation of life itself.
5. apply analytical and critical thinking skills to problems and issues in science and society and to the critical analysis and synthesis of biological literature.
6. demonstrate effective written communication skills in a biological context.

**COURSE OUTCOMES**

Upon completing BIOL 1113, the student will demonstrate the following competencies:

\* Define and explain basic biological concepts (characteristics of living things, levels of organization, biological Kingdoms, the scientific method, atomic particles, cellular components, organic compounds, photosynthesis and cellular respiration, cellular division, genetic crosses and genetic abnormalities)

\* Apply critical thinking skills to scientific inquiry

\* Analyze and interpret empirical and quantitative biological data

\* Demonstrate the ability to effectively communicate the fundamentals of biology in a written report

\* Demonstrate the ability to engage in productive teamwork

## 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 must 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 1113. 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 1113 ecourse site.

**\*\*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:**

### Grading Matrix

<b><u>Class Assignments</u></b>	<b>50 pts. (50%)</b>
Weekly Web-based Quizzes	
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>

**GRADING SCALE** 90-100=A; 80-89=B; 70-79=C; 60-69=D; Below 60=F

### TENTATIVE COURSE OUTLINE

Week 1	<b>INTRODUCTION</b> Chapter 1 - Concepts and Methods in Biology
Week 2	<b>Part I: PRINCIPLES OF CELLULAR LIFE</b> Chapter 2 - Chemical Foundation for Cells
Week 3	Chapter 3 - Carbon Compounds in Cells
Week 4	Chapter 3
Week 5	<b>EXAM 1(Chapters 1-3)</b> Chapter 4 - Cell Structure and Function
Week 6	<b>Cell Structure Group Activity</b> Chapter 5 - Ground Rules of Metabolism
Week 7	<b>EXAM 2 (Chapters 4 &amp; 5)</b>
Week 8	Chapter 6 -How Cells Acquire Energy
Week 9	Chapter 7 - How Cells Release Stored Energy
Week 10	<b>Osmosis is Group Activity</b> <b>EXAM 3 (Chapters 6 &amp; 7)</b>
Week 11	<b>Part II: PRINCIPLES OF INHERITANCE</b> Chapter 8 - Cell Division and Mitosis
Week 12	Chapter 9 - Meiosis
Week 13	<b>EXAM 4 (Chapters 8 – 9)</b> Chapter 10 - Observable Patterns of Inheritance
Week 14	Chapter 11- Chromosomes and Human Genetics
Week 15	<b>“Science in the News” Written Report</b> <b>EXAM 5 - FINAL EXAM- (Chapters 10 – 11)</b> <b>**ALL STUDENTS ARE REQUIRED TO TAKE THE FINAL EXAM, Wed., May 1, 10:30AM – 12:30PM**</b>

## COURSE PROCEDURE

Biology 1113 is a three semester credit hour lecture course that is held weekly. The lecture periods consist of discussions between students and the instructor. These lectures are designed to reinforce the textbook materials and to enhance the understanding of scientific concepts.

The student should:

1. Read assigned textbook chapters before class meetings.
2. Take notes and learn to distinguish between important and subordinate points.
3. Review notes outside the classroom.
4. Respond verbally to interrogatives posed by the instructor.
5. Ask relevant questions during the class discussion.
6. Answer review questions at the end of each chapter of the textbook.

**Examinations** At least five major exams will be given during the semester. Exam questions will be multiple choice. Use ParSCORE scans 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. 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. 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 (chapters 1 – 11) exam on the day that the final exam is administered.

## 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.