

## BIOL 4034 Practicum in Biology Summer 2019

**Instructor:** Charcacia T. Sanders  
**Section # and CRN:** Section#: P01 and CRN: 32128  
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**Office Hours:** Tuesday and Thursday by Appointment  
**Mode of Instruction:** [Face to Face]

**Course Location:** New Science Building Room 402  
**Class Days & Times:** MTWR 9:00 am – 12:20 pm  
**Catalog Description:** BIOL 4034 Practicum in Biology: 4 credit hours

Emphasis is placed on investigation and inquiry as a means of acquiring knowledge in the biological sciences. Materials will be drawn from current works in the fields of genetics, developmental biology, and ecology.

**Prerequisites:** Biology 1015, 1025, 1034, 3014, 3024, and 4014  
**Co-requisites:** None

**Required Texts:** General Ecology: Outline of contemporary ecology for university students, 2<sup>nd</sup> Edition, by Hans Ulrik, ISBN: 978-87-403-2201-9  
 Introduction to Scientific Research Projects, 1<sup>st</sup> edition, by Graham Basten, ISBN: 978-87-7681-674-2  
 Concepts in Scientific Writing, 1<sup>st</sup> Edition, J. Clifford Jones, ISBN: 978-87-403-1091-7  
 Access to World Wide Web and Library Resources.

**Recommended Texts:** Supplements: (Optional)

### Student Learning Outcomes:

Upon successful completion of this course, students will be able to:		Program Learning Outcome # Alignment	Core Curriculum Outcome Alignment
1	Demonstrate an understanding of the nature of the scientific process of discovery.	4	Critical Thinking
2	Explain the ecological and economic impact of plants to other organisms on the earth.	4	Critical Thinking Problem Solving
3	Demonstrate an understanding of how to solve problems using laboratory research.	5	Problem Solving

4	Demonstrate an understanding of the scientific process of sharing information.	5	Communication
5	Demonstrate ability to read and analyze scientific information.	5	Analytical

***This syllabus is subject to change at the discretion of the instructor. Students will be notified of such changes ahead of time via eCourse.***

## Major Course Requirements

### Method of Determining Final Course Grade

Course Grade Requirement	Value	Total
Instructor Evaluation of Student	1 Instructor Evaluation	20%
Oral Presentation	1 Oral Evaluation	30%
Biology Research Paper	1 Research Presentation	30%
Group Participation Evaluation	1 Group Evaluation	10%
Laboratory Quizzes	4 Quizzes	10%
<b>Total:</b>		<b>100.00%</b>

### Grading Criteria and Conversion:

A = 90% to 100%  
 B = 80% to 89%  
 C = 70% to 79%  
 D = 60% to 69%  
 F = 0% to 59%

### Detailed Description of Major Assignments:

Assignment Title or Grade Requirement	Description:
Instructor Evaluation of Student	Students will be evaluated by instructor on their performance in lab and field settings.
Oral Presentation	Students will be given 3 attempts to practice learned concepts using multiple choice questions.
Biology Research Paper	Students will write a detailed report of research findings and discuss outcomes.
Group Participation Evaluation	Students will be evaluated by group members on their performance in lab and field settings.
Laboratory Quizzes	Student's knowledge of scientific practices and concepts gained during class will be assessed using a combination of multiple choice and free response questions.

### Course Procedures or Additional Instructor Policies

Taskstream is a tool that Prairie View A&M University uses for assessment purposes. One of your assignments is REQUIRED to be submitted as an "artifact," an item of coursework that serves as evidence that course objectives are met. More information will be provided during the semester, but for general information, you can visit Taskstream via the link in eCourses.

- I. **CLASS FORMAT:** The class instructor facilitates learning through scientific inquiry. These classes require student participation during discussion, lab investigations, and field work. The instructor will ask students questions, present problems to solve and use audiovisuals to demonstrate concepts. Students should be prepared to actively participate in class to demonstrate their knowledge of biological concepts.
- II. **MATERIALS:** Students are required to maintain a lab notebook with all complete record of procedures (the actions you take), the reagents you use, the observations you make (these are the data), and the relevant thought processes that would enable another scientist to reproduce your observations.

- III. **QUIZZES:** You are required to take the quiz as scheduled with the rest of your class. **No make-up quizzes will be given automatically.** If you cannot take the quiz during the scheduled time you must contact the instructor immediately to discuss your options (e-mail or phone within 7 hours of missing the test) and the make-up quiz must be taken within 72 hours after the test have been administered. Do not assume that you are eligible to take a make-up. It is up to the instructor decide if a student is eligible for a make-up exam pending the submission of the appropriate documentation. Appropriate documentation must be supplied before any make-up quiz will be scored (please discuss with instructor what is considered an appropriate documentation). Make up quizzes will be given during a designated day and time at the discretion of the instructor.
- IV. **CLASS ATTENDANCE:** Regular and punctual class attendance is expected. Student absences will be recorded from the first day the class meets. In case of absence, it is the student's responsibility to contact the instructor. Students absent on official school business are entitled to make up coursework missed. In all other cases, the instructor will judge whether the student will be permitted to make up work and will decide on the time and nature of the makeup. However, the student is expressly responsible for any work missed regardless of the cause of the absence. The student must discuss such work with the instructor and should do so immediately on returning to school. If students do not appear at the prearranged time or meet the prescribed deadline for makeup work, they forfeit their rights for further makeup of that work. Students who stop attending class for any reason should contact the instructor and the Registrar's office to officially withdraw from the class. Failure to officially withdraw may result in a failing grade for the course.
- V. **CLASS CONDUCT:**
- A. The use of electronic devices in class is as follows and may be changed at the discretion of the instructor: Smartphones/Laptops/Tablets may be used for taking notes, participating in interactive teaching platforms, and following along with the PowerPoints. No chatting, texting, or engaging in social media will be allowed. If you violate your instructor's trust in this policy, you will no longer be allowed to bring your electronic devices into class. All electronic devices must be turned off and placed out of sight during exams and quizzes so that they can't be seen or used. Anything recorded in class (audio or video) may not be distributed or published without instructor's permission."
  - B. No cheating on exams, quizzes, reports, or any graded activity. Cheating will result in a grade of a zero.
  - C. Students enrolled in this course are not permitted to wear hats, caps, head rags, helmets or any type of hear gear in the class rooms for this course. Dress for success.

## SEMESTER CALENDAR

(Subject to change)

### TIMELINE

**Week One: July 8 Collecting Preliminary Data: Plant Belt Transect Study**

Assignment(s): Quiz 1 (July 11)  
Research Proposal via eCourses (Due July 13)

Note: A research proposal must be written. The Research Paper and Oral Presentation will not be accepted without a research proposal.

**Week Two: July 15 Experimental Design: Testing a Hypothesis**

Assignment(s): Quiz 2 (July 18)  
Question/Hypothesis/Methods via eCourses (Due July 20)

**Week Three: July 22 Charts, Tables, Graphs, and Statistics: Interpreting Data**

Assignment(s) Quiz 3 (July 25)  
Results via eCourses (Due July 27)

**Week Four: July 29 Refuted or Supported: Discussing the Significance of the Data**

Assignment(s): Quiz 3 (August 1)  
Introduction/Discussion/Literature Cited via  
eCourses (Due August 3)

## **Week Five: Aug 5 Group Oral Presentations**

### **Student Support and Success**

#### **John B. Coleman Library**

The library and its partners have as their mission "to provide resources and instructional material in support of the evolving curriculum, as a partner in Prairie View A&M University's mission of teaching, research, and service" and to support the University's core values of "access and quality, diversity, leadership, relevance, and social responsibility" through emphasis on ten key areas of service. It maintains library collections and access both on campus, online, and through local agreements to further the educational goals of students and faculty.

#### **Center for Academic Support**

The Center for Academic Support (CAS) offers Tutoring via peer tutoring. The services include workshops (i.e., Save My Semester, Recalculate Your Route), seminars (i.e., Tools You Can Use: TI-84), group review sessions (i.e., College Algebra Topic Reviews, GRE Preparation), group study opportunities (i.e., TSIA, HESI, Study Break, Exam Cram), and test-taking strategies (How to take Notes, Study Buddy, 5 Day Study Guide). The Tutoring Center is a nationally certified tutoring program through the National Tutoring Association. The peer tutors are trained and certified by the coordinator each semester. Location: J.B. Coleman Library

#### **COMPASS**

The Center for the Oversight and Management of Personalized Academic Student Success (COMPASS) is designed to help Prairie View students in their second year and beyond navigate towards graduation by providing the following services: Academic Advisement, Targeted Tutorials for Personalized Learning, Campus-Wide Referrals, and Academic & Social Workshops. Location: J.B. Coleman Library

#### **Writing Center**

The Writing Center provides student consultants on all aspects of the writing process and a variety of writing assignments. Writing Center consultations assist students in such areas as prewriting, brainstorming, audience awareness, organization, research, and citation. Location: Hilliard Hall 121

### **University Rules and Procedures**

#### **Disability statement (See Student Handbook):**

Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

#### **Academic misconduct (See Student Handbook):**

You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary 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.

### **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.

### **Sexual misconduct (See Student Handbook):**

Sexual harassment of students and employees 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.

### **Attendance Policy**

Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of "F". Absences are accumulated beginning with the first day of class.

### **Student Academic Appeals Process**

Authority and responsibility for assigning grades to students rests 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.

### **Disability statement (See Student Handbook):**

Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

## **TECHNICAL CONSIDERATIONS**

### **Minimum Recommended Hardware and Software:**

- Intel PC or Laptop with Windows 7; Mac with OS X; Smartphone or iPad/Tablet with Wi-Fi
- High speed Internet access
- 8 GB Memory
- Hard drive with 320 GB storage space
- 15" monitor, 800x600, color or 16 bit
- Sound card w/speakers
- Microphone and recording software
- Keyboard & mouse
- Most current version of Google Chrome, Safari, Internet Explorer or Firefox

**Note:** Be sure to enable Java & pop-ups

### **Participants should have a basic proficiency of the following computer skills:**

- Sending and receiving email
- A working knowledge of the Internet
- Proficiency in Microsoft Word (or a program convertible to Word)
- Proficiency in the Acrobat PDF Reader
- Basic knowledge of Windows or Mac O.S.

### **Netiquette (online etiquette):**

Students are expected to participate in all discussions and virtual classroom chats as directed. Students are to be

respectful and courteous to others on discussions boards. Foul or abusive language will not be tolerated.

**Technical Support:**

Students should go to <https://mypassword.pvamu.edu/> if they have password issues. The page will provide instructions for resetting passwords and contact information if login issues persist. For other technical questions regarding eCourses, call the Office of Distance Learning at 936-261-3283

**Communication Expectations and Standards:**

Emails or discussion postings will receive a response from the instructor, usually in less than 48 hours. Urgent emails should be marked as such. Check regularly for responses.

**Discussion Requirement:**

Online courses often require minimal to no face-to-face meetings. However, conversations about the readings, lectures, materials, and other aspects of the course can take place in a seminar fashion. This will be accomplished by the use of the discussion board. The exact use of discussion will be determined by the instructor.

**It is strongly suggested** that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it should be copied and pasted to the discussion board.