



**BIOL 3034- Microbiology  
Summer 2016**

**Instructor:** Dr. Kimberly Greer  
**Section # and CRN:** P02-12755  
**Office Location:** EE O'Banion Science 430J  
**Office Phone:** 936-261-3167  
**Email Address:** kagreer@pvamu.edu  
**Office Hours:** M-F 9a-11a  
**Mode of Instruction:** Face To Face

**Course Location:** O'Banion rm. 101  
**Class Days & Times:** M-F 1pm-4:50pm  
**Catalog Description:**

**Prerequisites:** Undergraduate level [CHEM 1033](#) Minimum Grade of C and Undergraduate level [BIOL 1015](#) Minimum Grade of C  
**Co-requisites:**

**Required Texts:** Prescott's Microbiology 9<sup>th</sup> Edition ISBN 978-0-07-340240-6

**Student Learning Outcomes:**

|   | Upon successful completion of this course, students will be able to:                                     |
|---|--|
| 1 | Format hypotheses in correct format and identify experimental procedures to address the hypotheses       |
| 2 | Apply basic microbiological information to answer scientific questions                                   |
| 3 | Describe scientific findings of laboratory experiments in written form                                   |
| 4 | Assemble scientific data into manuscript format  |
| 5 | Employ effective teamwork skills with emphasis on listening, responding, and creating a positive climate |

## Major Course Requirements

### Method of Determining Final Course Grade

| Assignment                 | Points per task          | Total points | Percentage of total grade |
|----------------------------|--------------------------|--------------|---------------------------|
| 3 Lecture exams            | 100 points each          | 300          | 0.2                       |
| 8 Lab reports              | 10 points each           | 80           | 0.05                      |
| 3 Lab quizzes              | 10 points                | 30           | 0.02                      |
| Attendance                 | Total for days taken     | 100          | 0.07                      |
| Group work                 | Total for projects taken | 140          | 0.09                      |
| LearnSmart web assignments |                          | 500          | 0.33                      |
| 1 Lab Exam                 | 150 points               | 150          | 0.1                       |
| 1 Comprehensive Final Exam | 200 points               | 200          | 0.13                      |
| Total points               |                          | 1500 points  | 1.0                       |

### Grading Criteria and Conversion:

A = 90-100

B = 80-89

C = 70-79

D = 60-69

F = <60

## Course Procedures or Additional Instructor Policies

### Taskstream

Taskstream is a tool that Prairie View A&M University uses for assessment purposes. One of your assignments may be considered 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.

### Cell phones

Cell phones must be secured within a backpack or purse during exams. The backpack or purse must be set aside, against a classroom wall and out-of-reach of any students. Any cell phones found on a person during an exam will result in an automatic "0" score on the exam.

### Tardies

Anyone 10 minutes or more late to laboratory sections will not be permitted into the section, and will receive an automatic "0" for that class period. Any assignments collected will not be permissible for submission, and attendance will be scored as "Absent" for that class period. Any scores received for a Tardy will not be eligible for dropping should lowest scores be dropped in final grade calculations.

## Semester Calendar

| <b>Class Date</b> | <b>Chapter Title</b>  | <b>Notes</b> |
|-------------------|---|--------------|
| <b>Jul 12</b>     | Pre-test, syllabus review, course materials review, personal data |              |
| <b>Jul 13</b>     | Ch. 1 Introduction, Scope, and History of Microbiology            |              |
| <b>Jul 14</b>     | Ch. 3 Bacterial Cell structures;                                  |              |
| <b>Jul 15</b>     |   |              |
| <b>Jul 18</b>     | Ch. 4 Archaea   |              |
| <b>Jul 19</b>     | <b>Exam 1: Ch. 1, 3, 4</b>  |              |
| <b>Jul 20</b>     | Ch. 5 Eukaryotic Cell structures                                  |              |
| <b>Jul 21</b>     |   |              |
| <b>Jul 22</b>     | Ch. 7 Microbial Growth  |              |
| <b>Jul 25</b>     | <b>Exam 2: Ch. 4, 5, 7</b>  |              |
| <b>Jul 26</b>     | Ch. 13: ON YOUR OWN   |              |
| <b>Jul 27</b>     | Ch. 14: Regulation of Bacterial Cellular Processes                |              |
| <b>Jul 28</b>     |   |              |
| <b>Jul 29</b>     | Ch. 17 Recombinant DNA Technology                                 |              |
| <b>Aug 1</b>      |   |              |
| <b>Aug 2</b>      | Ch. 18: Microbial genomics  |              |
| <b>Aug 3</b>      | <b>Take Home exam 3</b>   |              |
| <b>Aug 4</b>      |   |              |
| <b>Aug 5</b>      | Ch. 42 Biotechnology and industrial microbiology                  |              |
| <b>Aug 8</b>      | <b>8am Final Exam</b>   |              |

| <b>Lab</b>    | <b><u>Exercise(s) to perform</u></b> | <b><u>Note</u></b>                              | <b><u>DUE</u></b>                              |
|---------------|--------------------------------------|---|--|
| <b>Jul 12</b> | Lab safety                           | Forms must be signed off and checked in at role | Biology Lab agreement<br>Microbiology Pre-test |
| <b>Jul 13</b> | Microscopy                           | Ch. 2 text                                      | Scantron: online quiz                          |
| <b>Jul 14</b> | Simple stains<br>Gram stains         |   | Microscopy quiz<br>Microscopy lab report       |
| <b>Jul 15</b> |                                      |   |  |
| <b>Jul 18</b> |                                      |   |  |
| <b>Jul 19</b> |                                      |   |  |

|               |   |  |  |
|---------------|---|--|--|
| <b>Jul 20</b> | Sterile technique:<br>prokaryotic culture | <b>Temp differences<br/>pH differences<br/>aerobic vs. anaerobic</b> | <b>Simple stain report<br/>Gram stain report</b> |
| <b>Jul 21</b> | Culture conclusions/<br>examination       |  |  |
| <b>Jul 22</b> | Eukaryotic structures                     |  | <b>Prokaryotic culture<br/>report</b>            |
| <b>Jul 25</b> |   |  |  |
| <b>Jul 26</b> | Viruses                                   |  |  |
| <b>Jul 27</b> |   |  |  |
| <b>Jul 28</b> |   |  |  |
| <b>Jul 29</b> | Lactobacillus                             |  |  |
| <b>Aug 1</b>  | Lactobaccillus                            |  |  |
| <b>Aug 2</b>  | NO formal lab                             |  |  |
| <b>Aug 3</b>  | Meat lab                                  |  |  |
| <b>Aug 4</b>  | Meat lab                                  |  |  |
| <b>Aug 5</b>  | Meat lab                                  |  |  |
| <b>Aug 6</b>  | No formal lab                             |  |  |
| <b>Aug 7</b>  | Poster work                               |  |  |
| <b>Aug 8</b>  | Poster work                               |  |  |

## **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 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.

**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.