Biology Department
http://www.pvamu.edu/biology
Course Outline
BIOLOGY 1073
General Microbiology
Summer 2019

Instructor Name: Dr. Kimberly A. Greer, Assistant Professor
Office Location: Room **430J** in the **O'Banion Science Building** (formerly the **New Science Building**)
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Office Hours**:** By appointment; 12-1p M-R

Course Information
Course Location: **Lecture-** Rm 122 NSCI; **Lab-** Room 308 NSCI
Course number: **BIOL 1073 CRN:**
Class Meeting Days and Times MTWR Lecture: 1:00 p.m. – 2:20p.m.,
MTWR Laboratory: 2:30 p.m. – 4:30 p.m.

Catalog Description: BIOL 1073. General Microbiology. (2-2). Credit 3 semester hours. Morphology and physiology of microorganisms related to health and sanitation; disinfection, growth, and control of those organisms causing common infectious diseases. Laboratory fee required.

REQUIRED TEXTBOOKS: THESE TEXTBOOKS ARE REQUIRED FOR SUCCESSFUL COMPLETION OF THIS COURSE!!!!! TEXTBOOKS ARE MANDATORY.

Lecture Textbook: **Bauman,** Robert W. 2012. *Microbiology, With Diseases by Body System* 4th *Edition.* Pearson Education, Inc., publishing as Benjamin Cummings, San Francisco, CA.

Laboratory Manual: Biol 1073: Pre-nursing Microbiology laboratory manual. Available in the PVAMU bookstore.

Other Materials – Blue / black pens, #2 lead pencils, notebook paper, calculator, access to computer / printer, color pencils – red, blue, green, purple.
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=

Course learning outcomes: Upon completion of BIOL 1073, the student should successfully perform the following at a level of competency and demonstrate that the competency is utilized.

1. Demonstrates knowledge of the basic principles and concepts of life at the microscopic level as it pertains to microbes.
2. Comprehends the theoretical concepts in microbiology so that they may use this as a basis for future studies, whether it is in the area of Nursing or other allied health fields.
3. Analyze the inter-relationships among the microorganisms and between the microorganisms higher living forms.
4. Demonstrate the proper techniques and procedures of handling microscopic living organisms, many of which are pathogenic.

Purpose of Course: Microorganisms play an important role in the activities of mankind. This is especially important in the field of Nursing. Therefore, persons who enter this field must have an excellent background in the principles and concepts, which deal with microorganisms. This course is designed to provide the needed information and explanations about microorganisms that is important in the field of Nursing.

Attendance Policy: The students are expected to be **present and on time** for all scheduled lectures and laboratory periods. During these times lectures will be given, laboratory demonstrations will be conducted and exercises will be assigned and all pertinent questions answered.
If the student incurs an excused absence (Based on PVAMU University policy) with written documentation, he/she can make arrangements to make-up the missed assignment (s). You will not be permitted to complete or perform a laboratory session if you are in excess of 15 minutes late to lab.

Prairie View A&M University requires regular 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.

Absences: While it is understood that you will attend all lectures and laboratories, there are times when you may be absent. Excused absences are those that are due to illness (only valid with Doctor's note), attendance at university approved functions, civil or military services (only valid with documentation from legal authority). Documentation must be provided to the instructor prior to the event or immediately upon the student's return to class. Only verifiable, excused absences will be accepted for make up work, including ALL exams, submissions, and laboratory assignments.

Definition of Cheating and Plagiarism: *Prairie View A&M University is dedicated to a high standard of academic integrity among its faculty and students. In becoming part of the Prairie View University Academic community, students are responsible for honesty and independent effort. Disciplinary action will be taken against any student who alone or with others engages in any act of academic fraud or deceit.*

***If the student is caught cheating, he/she will receive a "0" for that assignment. Once the "0" has been assigned, the student **will not** be able to make up that work. ***

Course Evaluation Methods

Evaluation for the Lecture: In the lecture there will be three examinations and a comprehensive final examination, each will be worth 100 points. You will need a #2 lead pencil to take the exams and a Scantron.

Exam Policy: **Exams will be taken as scheduled. No makeup exams will be allowed except under documented circumstances (above, and as listed in student handbook)**.

Evaluation for the Laboratory: There are laboratory exercises and a completed laboratory report is due for each laboratory exercise performed. In order to receive credit for your laboratory report, you must turn it in when due. Reports must be in the laboratory manual, and should be removed from the book prior to submission. **No PHOTOCOPIES or late lab reports will be accepted**. For some laboratory reports, you will be required to draw what you see in the microscope field. Thus, you will need your color pencils.

Assignment	Points per task	
3 Lecture exams	100 points each	20% total
Lab reports & 2 lab quizzes	100 points each	20% total
1 Lab Final Exam	100 points	20% total
Comprehensive Final Exam	100 points	20% total
Attendance	As taken	20% total

(category avg * 0.2) + (category avg * 0.2) + (category avg * 0.2) + (category avg * 0.2) + (category avg * 0.2) = Final grade

The grading scale is as follows:

100 – 89.5 = A; 89.4 – 79.5 = B; 79.4 – 69.5 = C; 69.4 – 59.5 = D; below 59.5 = F

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.*

ADA Statement: *Students with disabilities who believe they may need adjustment in this class are encouraged to contact the Office of Disabilities Services at Room 317 Evans Hall, (936)857-2610 as soon as possible. Once you receive a letter of adjustment from the office, kindly make an appointment with me to discuss appropriate adjustments for this class.*

The below schedule is TENTATIVE only. The academic schedule is subject to change.
The student is advised to read the assigned chapter for each class day **before** he/she comes to class.

Course number:	**Day and times**	**Location**
Section P01:	MTWR Lecture: 1:00 p.m. – 2:20 p.m.	Room 122

Class Day	Chapter Title	Notes
Jul 8-9	Course introduction/ expectations, Ch. 1 Introduction, Scope, and History of Microbiology	
Jul 10-11	Ch 11. Characteristics of Prokaryotes	
Jul 15-16	Ch 12 Eukaryotic Cells: Groups, Reproduction, Protozoa;	
Jul 17, 22	Ch. 3 Cell Structure and Function; Class review	
Jul 18	Exam 1 Chapters 1, 11/12	
Jul 23	Ch. 4: Microscopy, Staining, and Classification	
Jul 24, 29	**Ch. 6: Microbial Nutrition and Growth**	
Jul 25	Exam 2: CH. 3, 4	
Jul 29	Ch. 13: Viruses	
Jul 30	Exam 3: CH. 6, 13	
Aug 1	Ch. 19: Microbial Diseases of the Skin and Wounds	
Aug 1	Ch. 24: Microbial Disease of the Urinary and Reproductive Systems	
Aug 5	Final Exam	

Course number:	**Day and times**	**Location**
Section P61:	MTWR Laboratory: 2:30p.m – 4:30 p.m.	Room 308 NSCI

*** Read across table from left to right starting with the Class Day.

Class Day	Exercise(s) to perform	DUE
Jul 8	Lab safety	**none**
Jul 9	Lab Safety contract	**Contract due ONLINE**
Jul 10	Lab 1: Microscope Exercise	
Jul 15	Lab 2: Protists	**Lab 1 report** **Lab Quiz 1: Turn in scantron**
Jul 16	Lab 2	**Lab 2**
Jul 17	Lab 3: motility and flagella	**Lab 2**
Jul 18	NO LAB: EXAM 1	
Jul 22	Lab 5: Bacterial colony morphology Lab 6: aseptic technique	**Lab 3**
Jul 24	Analyze plates from lab 5 & 6	**Lab 5 & 6**
Jul 29	Lab 7: smear and simple stain	
Jul 30	Lab 8: Gram stain	**Lab 7**
Jul 31	Lab review	**Lab 8**
Aug 1	Lab Final Exam	

*** MICROBIOLOGY LABORATORY SAFETY ***

1. The student must know the location, purpose and use of emergency safety equipment before starting any laboratory assignment.

2. The student must **never** eat, drink, or smoke in the laboratory. Use of cellular phones in the laboratory is prohibited.

3. The student must clean his laboratory workbench space with disinfectant before and after using it to do your laboratory work.

4. The student must **never** place pencils, pens or any other objects into your mouth while in the laboratory.

5. The student must **never** take a culture out of the laboratory.

6. If a culture is spilled, the student will notify the instructor and cover the area of the spill with an appropriate disinfectant.

7. The student must report all accidents to the instructor immediately.

8. Please be careful when you use any of the laboratory equipment and materials. Many of the items are delicate instruments, which should be treated with care. This is especially true of the microscopes.

9. The student must return and replace the laboratory equipment and materials after he is finished using them (*e.g*., microscope, stains, water baths, etc.).

10. The student must dress appropriately for the laboratory class, *e.g.*, **closed-toe / closed-heel shoes, skirts / shorts that extend to the knee while sitting, shirt and blouse tops that cover the shoulders / upper arms and chest.**

    ********Open-toe / open-heel shoes and clothing that exposes large areas of the body (skin) are NOT to be worn in the laboratory. If the student is not dressed appropriately he / she will be asked to leave the laboratory and return appropriately dress. The student will not be allowed to make up any missed assignment. **********