Biology Department
http://www.pvamu.edu/biology
Course Outline
BIOLOGY 1073
General Microbiology
Summer 2017

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**:** 12p-1p TRF; 4:30-5:30p TR; or by appointment

Course Information
Course Location: **Lecture-** Rm 122 NSCI; **Lab-** Room 308 NSCI
Course number: **BIOL 1073 CRN:** 30131
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: Your laboratory materials will be posted on eCourses and should be printed out and brought with you to every lab.

Other Materials – Blue / black pens, #2 lead pencils, notebook paper, pocket folder with brads, dividers with tabs, 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 with written documentation for the reason, he/she will make arrangements to make-up the missed assignment (s) within two class days upon return to the classroom. The validity of the excuse is the responsibility of the instructor. 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, attendance at university approved functions, civil or military services, or family emergencies. Documentation must be provided to me, the instructor prior to the event or immediately upon the student's return to class. Only verifiable, excused absences will be accepted so that the student may make up his / her work – lecture exams 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 four examinations and a comprehensive final examination, each will be worth 100 points. **There will also be unannounced quizzes.** The examinations will cover those topics covered in class from the textbook and laboratory exercises. You will need a #2 lead pencil to take the exams and a Scantron. Total lecture points = 530.

Exam Policy: **Exams should be taken as scheduled. No makeup exams will be allowed except under documented emergencies** (See Student Handbook).

Evaluation for the Laboratory: Please notice that for some days, we will do two or three exercises for that day. There are 15 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. **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	Total points
4 Lecture exams	100 points each	400 points
8 Lab reports	10 points each	80 points
Lab quizzes	50 points	50 points
Lab Exam	70 points	70 points
Comprehensive Final Exam	100 points	100 points
Total points		700 points

Your final grade for the class is calculated by: $\frac{\text{your total points}}{700} \times 100 =$ _____ %.

The grading scale is as follows:

100 – 90 = A; 89 - 80 = B; 79 – 70 = C; 69 – 60 = D; below 60 = 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 103

Class Day	Chapter Title	Notes
Jun 5	**Course introduction/ expectations, Ch. 1 Introduction, Scope, and History of Microbiology**	
Jun 6	**Ch 11. Characteristics of Prokaryotes**	
Jun 7	**Ch 12 Eukaryotic Cells: Groups, Reproduction, Protozoa;**	
Jun 8	**Ch. 12 Eukaryotic Cells: Fungi, Lichen, Algae, Molds**	
Jun 12	**Class review**	
Jun 13	**Exam 1 Chapters 1, 11/12**	
Jun 14	**Ch. 3 Cell Structure and Function**	
Jun 15		
Jun 19	**Ch. 4: Microscopy, Staining, and Classification**	
Jun 20	**Ch 6. Microbial Nutrition and Growth**	
Jun 21		
Jun 22	**Exam 2 Chapters 3, 4, 6**	
Jun 26	**Ch. 13: Viruses**	
Jun 27		
Jun 28	**CH 19. Microbial Diseases of the Skin and Wounds**	
Jun 29	**Exam 3 Chapters 13, 19**	**Take Home Exam 4**
Jul 3	**Laboratory Final exam**	
Jul 4	**HOLIDAY**	
Jul 5	**CH 22. Microbial Diseases of Respiratory System**	
Jul 6	**Ch. 24: Microbial Disease of the Urinary and Reproductive Systems**	
Jul 10	**Microbiology 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
Jun 5	Lab safety	**none**
Jun 6	Lab 1: Microscope Exercise Lab 4: Algae and Cyanobacteria	**Lab Safety contract DUE;** **Quiz 1: microscopes and lab safety**
Jun 7	Lab 5: Protozoans Lab 6: Fungi	**Lab 4**
Jun 8	Lab 2: Aseptic Technique Lab 3: streak plates	**Lab 5 & 6**
Jun 12	Broth and Agar Slant Culture	
Jun 13	Evaluate plates and record data	
Jun 14		**Lab 2 & 3**
Jun 15	Online lab: simple stain and gram stain	
Jun 19	Simple staining	**Online multiple choice "gram stain"**
Jun 20	Gram staining	**Simple stain report**
Jun 21	Organism collection	**Gram stain report**
Jun 22	Sample observation & testing	
Jun 26	Antibiotic testing	**Sample report**
Jun 27	Off day- plates growing	
Jun 28	Review for lab final	**Antibiotic testing**
Jun 29	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. **********