PRAIRIE VIEW A&M UNIVERSITY

SYLLABUS

[BIOL 1015 General Biology]
[Summer 2017]
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Instructor: Dr. George E Brown
Section # and CRN: P01 30126
Office Location: 430F New Science
Office Phone: 936-261-3161
Email Address: gebrown@pvamu.edu
Office Hours: 4:00p.m.-5:00p.m. And 7:00p.m. - 8:00p.m. MWF Room 10104 Students may schedule a tutorial session time with the instructor 7:00p.m.on Monday, Tuesday, Wednesday, Thursday or Friday in room 104. Tutorials are also conducted at student request on Saturday 2:00p.m. in room 104. Please make your request either immediately before class begins or during class so that the instructor may announce the session to the entire class.

Mode of Instruction: [Face to Face]

Course Location: Room 104 for lecture, and 315 for laboratory New Science Building

Class Days & Times: MTWRF Lecture at 8:00a.m'- 10:00 a.m.in room 104 and Laboratory at 1:00p.m.- 3:50p.m. MTWRF in room 315

Catalog Description: [Basis of life, cell theory, cell structure, energy transformation, reproduction, genetic variability and origins of diversity of organisms]

Prerequisites: [No prerequisites]
Co-requisites: BIOL 1015 P61 (30168) laboratory section is co-requisite because BIOL 1015 is a combined lecture-laboratory course. Students must be enrolled in both the lecture section and a laboratory section[]

Required Texts: **Course Textbook**: Campbell Biology, **Tenth Edition**, by Jane B. Reece, Lisa A. Urry. Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, and Robert B. Jackson ISBN - 13: 978-0-321-77565-8 or ISBN-10: 0-321-77565-1

Recommended Texts:

Supplements: (Optional)

1. Student Study Guide to accompany Campbell Biology, Ninth Edition by Martha R. Taylor.
   ISBN: -13: 978-0-321-83392-1 or ISBN: 10:0-321-83392-9

2. Website to accompany Campbell Biology, Tenth edition; "Mastering Biology", Learn More at www.masreringbiology.com It is an online learning tool that contains pretest, narrated animations, and tutorials on basic math, chemistry, study skills, and word roots. It provides access to quizzes, glossary, exercises, internet activities, and annotated web links. Access to this website is provided with the purchase of a new textbook from a university bookstore. The publisher charges $80 for access if you do not purchase a new textbook. Therefore the

use of this web site is optional for this course.

Materials needed to enhance learning biology:

1. Required Course Textbook (Students must read the chapters in the textbook prior to class and be prepared to be quizzed by the instructor)
2. Students are encouraged to maintain a notebook with all class handouts, graded exams, reports, and quizzes attached to the notebook.
3. **Number 2 pencils** are required for exams
4. At least 8 each **SCANTRON forms 884-E**S (Answer choices for 200 questions) for each exam

Student Learning Outcomes:

	Upon successful completion of this course, students will be able to: **[NOTE: Begin each outcome with a verb]:**	**Program Learning Outcome # Alignment**	**Core Curriculum Outcome Alignment**
1	Conduct of laboratory investigations using safe, environmentally appropriate, and ethical practices.		
2	Understand the use of the scientific method during laboratory investigations. a. Plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting instruments and technology. b. Collect data, organize it, analyze it, evaluate, make inferences, and predict trends. c. Communicate valid conclusions.		
3	Use critical thinking and scientific problem solving to make informed decisions. a. Analyze, review, and critique scientific explanations, including hypotheses and theories using scientific evidence and information. b. Draw inferences based on data.		
4	Describe the characteristics of living things that distinguish them from non-living things. a. Describe the hierarchy of biological organization. b. Contrast the six kingdoms of living things and know examples of each. c. Summarize the role and examples of producers, consumers, and decomposers.		
5	Understand the chemical basis of life. a. Name the principle elements in living things and provide a function of each. b. Learn the mass, charge, and arrangement of electrons, protons and neutrons in the principle atoms of living things to include the electron orbitals, energy levels, and electron shells. c. Distinguish between atomic number and atomic mass. d. Explain how the number of valence electrons of an atom is related to its chemical properties. e. Compare the mechanisms by which ionic bonds, covalent bonds, and hydrogen bonds are formed. f. Explain how cations and anions form and how they		

	interact. g. Distinguish between oxidation and reduction. h. Show how hydrogen bonds are formed between water molecules and explain how they are responsible for the various properties of water that are essential for life. i. Convert the hydrogen ion concentration (moles/liter) of a solution to a pH value. j. Contrast acids, bases, and salts. Describe the composition of salts and why they are important to organisms.		
6	Demonstrate an understanding of the four types of organic molecules. a. Distinguish between organic molecules and inorganic compounds. b. Describe the properties of carbon that make it the central atoms of organic compounds. c. Distinguish between the three types of isomers. d. Identify the major functional groups that present in certain organic molecules. e. Learn the function and draw the structures of the carbohydrates, lipids, proteins, and nucleic acids to include the building block molecules: monosaccharaides, glycerol, fatty acids, amino acids, phosphates, and nucleotides. f. Understand biological function of each type of organic molecules organic molecules studied. g. Draw the structures of amino acids, explain how they are grouped according to their radical, group, and explain the levels of protein structure. h. Draw the chemical structures of ribonucleotides and deoxy-ribonucleotides to include the purines, pyrimidines, pentoses, and phosphate groups. i. Draw the structure of DNA and RNA.		
7	Explain why the cell is the basic unit of life and describe the cell theory. a. Compare and contrast the characteristics of prokaryotic and eukaryotic cell. b. Explain why the relationship between surface area and volume of a cell determines its efficiency and entrance into cell division. c. Describe the structure and function of the various bacterial cell structures. d. Describe the structure and function of eukaryotic cell structures and organelles e. Explain the methods used to study cells. f. Trace the path of proteins synthesized in the rough endoplasmic reticulum as they are processed, modified and transported to specific destinations. g. Compare the functions of mitochondria and chloroplasts. h. Explain the structure and function of microtubules, intermediate filaments, and actin filaments and their importance to cells and animal tissues. i. Describe how flagella, cilia, pseudopods, actin and myosin function in cellular and animal movement.		
8	Know the phospholipids bilayer structure and function of biological		

	membranes. a. Explain the importance of cellular membranes and their functions. b. Explain how the various classes of membrane proteins associate with phospholipids bilayer and discuss the role of each class of proteins. c. Describe the passage of materials through the membranes by diffusion, osmosis, facilitated diffusion, active transport, endocytosis, and exocytosis. d. Understand how cells communicate by cell signaling. e. Demonstrate how cell form tissues and how the various cell junctions connect cells.		
9	Know the laws of thermodynamics that apply energy transformations in living systems. a. Know how ATP and GTP are the energy currency of cells. b. Understand how organic catalyst such as enzymes and ribozymes speed up specific chemical reactions in cells. c. Know how the various enzymes function and how they are regulated.		
10	Know the four stages of aerobic respiration. a. Know the enzyme catalyzed reaction steps in stage I of glycolysis and stage II of glycolysis. b. Draw the substrates and products of each step of glycolysis. c. Draw the enzyme, substrate and products of the conversion of pyruvate to acetyl CoA. d. Draw the enzymes, substrates, and products of each step of the citric acid cycle. e. Conceptualize the energy conversions of each step of the electron transport chains and the coupled oxidative phosphorylation.		
11	Understand photosynthesis. a. Know how covalent bonds of water are disrupted during the light dependent reaction and the three products are produced. b. Know how ATP is formed by chemiosmosis. c. Demonstrate by drawing the enzyme catalyzed steps of the Calvin Cycle to include the substrates and products. d. Draw the substrates and products of each step of the synthesis of alpha glucose from two glyceraldehydes 3-phosphate (G3P) molecules.		
12	Understand cell communication and regulation of the cell cycle. a. Understand the structure and functions of cellular receptors. b. Describe signal transduction and the cellular response. c. Explain how the cell cycle is regulated.		
13	Understand chromosomes, mitosis, and meiosis. a. Explain chromosomes in terms of genes, loci,		

	heterochromatin, euchromatin, and species number of chromosomes, sister chromatids, centromeres, and kinetochores. b. Describe the principle events of the stages of the eukaryotic cell cycle and how it is controlled. c. Diagram the process of mitosis. d. Draw the process of both stages of meiosis. e. Distinguish between asexual reproduction and sexual reproduction. f. Distinguish between haploid cells and diploid cells. g. Define homologous chromosomes.		
14	Learn and understand the basic principles of heredity. a. Define and use correctly the terms allele, locus, genotype, phenotype, dominant, recessive, homozygous, heterozygous, monohybrid cross, dihybrid cross, trihybrid cross, and test cross. b. Apply the product rule and sum rule when predicting the outcomes of genetic crosses. c. Solve genetic problems involving complete dominance, incomplete dominance, epitasis, polygenes, multiple alleles, and X-linked inheritance. d. Explain some of the ways that genes may interact to affect the phenotype. e. Explain the genetic determination of sex.		
15	Understand how the structure of DNA forms the genetic codes for genes. a. Summarize the evidence observed in the 1950's demonstrating that DNA is the genetic material. b. Draw how the four types of deoxyribo-nucleotide subunits are bonded together to form the structure of DNA. State the base pairing rule for DNA. c. Draw how the ribo-nucleotide subunits are bonded together to form RNA. d. Understand DNA transformation of bacteria, and bacteriophage DNA transduction of bacteria. e. Summarize the evidence that demonstrated semi-conservative replication of DNA. f. Explain the steps of DNA replication. g. Know each enzyme involved in DNA replication and its function. h. Compare the organization of DNA in prokaryotic and eukaryotic cells.		
16	Demonstrate by drawings an understanding of gene expression (transcription). a. Summarize the early evidence that most genes code for proteins. b. Outline the flow genetic information (central dogma) from DNA to Protein. c. Know the various types of RNA polymerases and how they catalyze the synthesis of RNA. d. Know the substrates and products of transcription		
17	Demonstrate an understanding of the substrates, products, enzymes and ribozymes involved in the steps of translation. a. Identify the features of tRNA that function in decoding the genetic information during translation. b. Explain how ribosomes function in protein synthesis.		

	c. Diagram the processes of initiation, chain elongation, and chain termination in protein synthesis. d. Compare mRNA synthesis, modifications, and ribosome recognition sites in prokaryotes and eukaryotes.		
18	Demonstrate knowledge of regulation of gene expression. a. Explain the organization of bacterial genes into operons. Explain the function of each gene. b. Explain why some operons are inducible and others are repressible. c. Explain the role of repressors in the regulation of gene expression. d. Differentiate between positive and negative control of operon gene expression. e. Draw the components of a eukaryotic gene and the DNA sequences that are involved in the regulation of transcription of that gene. f. Provide examples of DNA binding proteins and describe how they bind to DNA. g. Explain how transcriptional factors (proteins) facilitate transcription. h. Describe how a change in chromosomal structure affects which genes are expressed. i. Explain how one gene in a multicellular eukaryote might be able to produce different products in different types of cells. j. Describe types of regulatory controls that can be exerted in eukaryotes after the mature mRNA is formed.		
19	Demonstrate knowledge of DNA technologies and genetic engineering. a. Demonstrate how restriction enzymes cut DNA molecules and provide examples of how these restriction endonucleases are used in recombinant DNA technology. b. Summarize the properties of plasmids cloning vectors. c. Distinguish between a genomic library and a cDNA library. d. Describe uses for DNA hybridization probes. e. Explain how specific primers are used to amplify (replicate) specific genes from mixture genomic DNA or cDNA. f. Diagram the dideoxyribo-nucleotide triphosphates method of sequencing DNA. g. Provide a list of important proteins that have been produced by genetic engineering. h. Describe some transgenic plants and animals that been produced.		
20	Demonstrate knowledge of the human genome and human genetics. a. Define human genetics, human genome, bioinformatics, and pharmacogenomics. b. Determine the probable genotypes of the individuals in a pedigree. c. Distinguish between chromosomal abnormalities and single gene defects.		

	d. Draw how non-disjunction may occur during meiosis to cause Down's syndrome, Klinefelter Syndrome, and Turner Syndrome. e. Explain how each of the following genetic defects is inherited: phenylketonuria, sickle cell anemia, cystic fibrosis, Tay-Sachs disease, Huntington disease, color blindness, and hemophilia A. f. Describe how prenatal diagnosis is made by amniocentesis, chorionic villus sampling and ultra-sound imaging.		
21	Demonstrate an understanding of how the regulation of gene expression controls development of multicellular organisms. a. Distinguish between cell determination and cell differentiation. b. Describe evidence that demonstrated totipotency (nuclear equivalence) of some differentiated plant and animal cells. c. Explain the vertebrate cell lineage from zygote to germ layers to adult structures, organs and systems. d. Distinguish between the function of maternal effect genes, segmentation (zygotic) genes, and homeotic genes of animals. e. Explain how cell signaling and transcription factors control the order in which genes are expressed during development. Provide some examples of genes that are known to function as genetic switches in development. f. Define induction and programmed cell death and give examples of the roles they play in development.		

Major Course Requirements

Method of Determining Final Course Grade

Course Grade Requirement]	Value	Total
1) Exam 1, Monday, 6/12/17 Chapters 1-5	6.15%	6.15
2) Exam 2, Thursday, 6/15/17 Chapters 1-8	6.15%	6.15
3) Exam 3, Monday, 6/19/17 Chapters 1-10	6.15%	6.15
4) Exam 4, Thursday, 6/22/17 Chapters 1-13	6.15%	6.15
5) Exam 5, Monday, 6/26/17 Chapters 1-15	6.15%	6.15
6) Exam 6, Thursday, 6/29/17 Chapters 1-17	6.15%	6.15
7) Exam 7 Monday, 7/03/17 Chapters 1-21	6.15%	6.15
8) Laboratory Grade	6.15%	6.15
	50.00%	50.00
9) **FINAL EXAM** Monday, 7/11/16 (Covers chapters 1-21) Grade		
Total:	**100%**	**100**

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: [Demonstrate on the cumulative final exam that they can earn scores of 70% to 100%. Therefore students can earn up to to 50% of the semester grade from their score on the final exam.]

Assignment Title or Grade Requirement	Description
Score 70%-100%	Standardized Cumulative Final Exam test knowledge of all chapters taught during the semester which should be chapters 1 through 21.

Course Procedures or Additional Instructor Policies

I. [**Course Purpose and Objectives**:

The purpose of this course is to provide first year biology majors with a detailed knowledge of general biology that satisfies the prerequisites for entry into health profession schools and graduate biomedical programs. The **outcome expectations for learners** are listed below. This is course is part one of a comprehensive introduction of the concepts of modern Biology for students majoring in Biology. It covers the chemical basis of life, organization of cells, biological membranes, cell communication, system, energy and metabolism, how cells make ATP, energy releasing pathways, photosynthesis, and regulation of the cell cycle, mitosis, meiosis, and principles of heredity, DNA, regulation of gene expression, DNA Technology, genomics, and developmental genetics. The second semester course, BIOL 1025, is Part

Two. It covers the diversity of life, evolution, structure and life processes in plants and animals, and ecology.

II. **Type of Course**:

The class instructor conducts face to face discussion type classes. These classes require student participation and demonstrations. The instructors will ask students questions, present problems to solve and use audiovisuals to demonstrate concepts. Students should be prepared to actively participate in class by answering questions, or going to the marker board to demonstrate their knowledge of biological concepts. Therefore it is essential for students to read the assigned textbook chapter and write notes of what they have read before the instructor discusses that chapter in class. **Grades are determined** by student performance on exams that test knowledge of the **study objectives for each chapter.** Students should be prepared to ask questions at the beginning of each class about concepts or questions that they were not able to comprehend during their individual studies. Face to face tutorials conducted in room 106 to academically enhance student learning. These support activities should enhance student's performance of the **outcome expectations for learners.**

Students are required to bring their BIOL1015 textbook and course materials to each class and when they meet with the instructor for office conferences, study sessions, tutorials, laboratories or any part of the course. In recent years some students have misunderstood the purposes of office hours and committed inappropriate request for higher grades than they have earned. **This instructor will not discuss such inappropriate request.**

III. **EXAMS**

All exams cumulative. **The cumulative final exam** is scheduled for 8:00a.m. – 10:30a.m., **Monday, July 10, 2017** in room A101. **Final exams are required** to be given **only** at the times and dates announced in the Summer 2016 University Final Exam Schedule. Students **must arrange** their schedule and activities so that they are prepared and **present for the final exam**. Students are strongly advised to take all exams at the scheduled time. During the past 41 years**, only four students have passed** make-up exams in this class. Plan and schedule your activities so that you can be present to take all exams at the scheduled time.

IV. Class Attendance:

Learning is a voluntary act. The University Attendance Policy requires students to be present for each scheduled class. **Excessive absenteeism will result in the student's grade being reduced.**

V. Conduct That Is Not Allowed:

a. **Cellular phones, I-Pads, I-Pods, Palm pilots, CD players, Radios, Cameras, Lab top Computers and other sorts of high technology communication instruments are not allowed to be used for any part of this course unless they are provided by the Biology Department.. These instruments of cheating on exams and tests must be turned off and locked in your book bag so that they can't be seen or used.**
b. **No cheating on exams, quizzes, reports, or any graded activity.**
c. Male sstudents 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.

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Semester Calendar

Week One:
Topic Description
Readings:

M **Lecture 8:00a.m.: Read** Chapters 1 and Unit 1 THE CHEMISTRY OF LIFE, Chapter 2 before the 8:00a.m. lecture
Lab: 1:10p.m. Safety/Pre Exam, Scientific Method, Standard Deviations Conversions, Healthy Living
T **Lecture: Read** Chapter 2 and 3 before the 8:00a.m. lecture
Lab: 1:10p.m. Bring Text Book, Essential Elements, compounds, atomic mass, bonds, molecular shape, chemical reactions
W **Lecture:** Read Chapters 3 and 4 before 8:00a.m. lecture
Lab: 1:10p.m. Acids and bases, pH scale, buffers, properties of water, Functional groups, formation of bonds, valence electrons, hydrocarbons, isomers, ATP
R **Lecture:** Read Chapter 5 before the lecture at 8:00a.m.
Lab: 1:10p.m. Carbohydrates and lipids
F **Lecture:** Read Unit 2 THE CELL Chapter 6 before the 8:00a.m. lecture
Lab: 1:10p.m. Proteins

Assignment (s):

M Study Quiz for Chapter 1 on **e-course**
T Study Quiz for Chapter 2 and 3 on **e-course**
W Study Quiz for Chapter 4 on e-course
R Study Guide hand outs and quiz for chapter 5 on e-course
F Study quiz for chapter 6 on e-course

Week Two:
Topic **Description**
Readings:

Unit 3; THE CELL

M **Lecture:** Exam 1 at 8:00a.m. in room 104.
Read Chapter 7 before lecture at 1:10p.m.
(The laboratory class occurs following the lecture)
T **Lecture:** Read Chapter 8 before 8:00a.m. lecture
Lab: 1:10p.m. BIM, Proteins, Nucleic Acids, Nitrogenous bases, Sickle Cell, DNA,
W **Lecture:** Read Chapter 9 before 8:00a.m. lecture
Lab: 1:10p.m. Cells using laboratory iPads, Types of microscopes
R **Lecture:** Exam 3 at 8:00a.m in room 104.
Read Chapter 9 before lecture at 1:10 p.m.
(The lab occurs following the lecture)
F **Lecture:** Read Chapter 10 before lecture at 8:00a.m.
Lab: Lab Test 1 at 1:10p.m.

Assignment (s):

M Chapter 7 study quiz on e-course and class handouts
T Chapter 8 study quiz and class handouts
W Chapter 9 study quiz and class handouts
R Chapter 9 study quiz and class handouts
F Chapter 10 study quiz and class handouts

Week Three:

Unit 2; THE CELL
M **Lecture:** Exam 3 at 8:00a.m in room 104. The exam covers chapters 1 to 10.

Read for chapter 11 before the lecture at
1:10p.m. (The lab occurs following the lecture)

Readings

T **Lecture:** Read chapter 11 before the 8:00a.m. lecture
Lab: 1:10p.m. Osmosis, diffusion (passive and active)
W **Lecture:** Read chapter 11 before the 8:00a.m. lecture
Lab: 1:10p.m. Enzymes, metabolic pathways
R **Lecture:** Exam 4 at 8:00a.m.in room 104.
Read chapter 12 for lecture at 1:10p.m.
The lab occurs following the lecture)
F **Lecture:** Read chapter 12 and chapter 13 lecture before
the 8:00a.m lecture in room 104.
Lab: 1:10p.m. Glycolysis

Assignments

M Study quiz for chapter 11
T Study quiz for chapter 11 and class handouts
W Study quiz for chapter 12 and class handouts
R Study quiz for chapter 12 and class handouts
F Study quiz for chapter 13 and class handouts

Week Four:

Unit 3 GENETICS

Readings

M **Lecture:** Exam 5 at 8:00a.m. in room 104 covers
Chapter 1 to 13.
Finish reading Chapter 13 for lecture at
1:10p.m. (The lab occurs following the lecture)
T **Lecture:** Read Chapter 14 before the 1:10a.m. lecture
Lab: Cellular respiration, Video, fermentation
W **Lecture:** Read Chapter 14 before the 8:00a.m. lecture
Lab: Photosynthesis
R **Lecture:** Exam 6 at 8:00a.m. in room 104.
Read Chapter 15 before 1:10p.m. lecture
(The lab occurs following the lecture)
F **Lecture:** Read Chapters 15 and 16 before 8.00a.m. lecture
Finish reading chapter before the 1:10p.m.
Lecture (The lab occurs following the nlecture)

Assignments

M Study quiz for chapter 13
T Study quiz for chapter 14
W Study quiz for chapter 14 and class handouts
R Study quiz for chapter 15
F Study quiz for chapter 15

Week Five:

Readings

M **Lecture:** Exam 7 at 8:00a.m. in room 104.
Read Chapter 17 and 18 before the 1:10p.m.
Lecture (The lab on Urinalysis occurs
following the lecture)
T July 4 Holiday (No Class)
W **Lecture:** Read Chapters 19 and 20 before the
8:00a.m. Lecture.
Lab: 1:10 p.m. Student groups presentations
Healthy living, challenge power point
R **Lecture:** Read Chapter 21 before the 8:00a.m. lecture
Lab: 8:00 a.m. Final Laboratory Exam

Friday July 7, Review for final exam
Monday, July 10, 8:00a.m. Final Lecture Exam room 104

T Study chapter 16 quiz
W Study chapter 17 quiz
R Study chapter 18 quiz
F Study for Final Exam

Assignments

Course Outline:

Chapter

INTRODUCTION:

1. Evolution, the Themes of Biology, and Scientific Inquiry

Unit 1 THE CHEMISTRY OF LIFE

2. The Chemical Context of Life
3. Water and life
4. Carbon and the Molecular Diversity of Life
5. The Structure and Function of Large Biological Molecules

Unit 2 THE CELL

6. A Tour of the Cell
7. Membrane Structure and Function
8. An Introduction to Metabolism
9. Cellular Respiration and Fermentation
10. Photosynthesis
11. Cell Communication
12. The Cell Cycle

Unit 3 GENETICS

13. Meiosis and Sexual life Cycles
14. Mendel and the Gene Idea
15. The Chromosomal Basis of Inheritance
16. The Molecular Basis of Inheritance
17. Gene expression: From Gene to Protein
18. Regulation of Gene Expression
19. Viruses
20. DNA Tools Biotechnology
21. Genomes and Their Evolution

Additional Related Reference Material Will Come From The Following Chapters:

22. Descent with Modification
23. The Evolution of Populations
24. The origin of Species
25. The History of Life on Earth
26. Phylogeny and the Tree of Life
27. Bacteria and Achaea
28. Protists
29. Plant Diversity I
30. Plant Diversity II
31. Fungi
32. An Overview of Animal diversity
33. An Introduction to Invertebrates
34. The Origin and Evolution of Vertebrates
35. Plant Structure, Growth and Development
36. Resource Acquisition and Transport in
37. Vascular Plants
38. Soil and Plant Nutrition
39. Angiosperm Reproduction and biotechnology
40. Plant Responses to Internal and External Signals
41. Basic Principles of Animal Form and Function
41. Animal Nutrition
42. Circulation and Gas Exchange
43. The Immune System
44. Osmoregulation and Excretion
45. Hormones and the Endocrine System
46. Animal Reproduction
47. Animal development
48. Neurons, Synapses, and Signaling
49. Nervous Systems
50. Sensory and Motor Mechanisms
51. Animal behavior
52. An Introduction to Ecology and the Biosphere
53. Population Ecology
54. Community Ecology
55. Ecosystems and Restoration Ecology
56. Conservation Biology and Global Change

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 accomplish 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.

XII. Summer 2016 Semester Calendar

The Academic Calendar for Summer 2016 – 1st 5 week session is published on the University's web site which can be accessed by students.

1. Instruction begins for this class on **Monday, June 5, 2017**

2. **Monday, June 5, 2017 is** Last Day for Late Registration and Add Courses- Web registration closed

3. **Thursday, June 8, 2017 is** Last Day to withdraw from a class without Academic Record

4. **Friday, June 30, 2017:** Biology majors should start their intensive **Study Schedule** for their very important Final Exam

5. **Tuesday, July 4, 2017 is a National Holiday.** The University is closed.

6. **Friday, July 7, 2017 is** Course Review Day: **Friday, July 7, 2017 is** the Last Day to withdraw from the University (includes all classes)

7. **FINAL EXAM is scheduled for Monday, July 10, 2017, 8:00 a.m. in room 104.** The cumulative final exam will constitute the remaining 50% of the final semester grade. **It will test all topics covered during the semester. Final exams are required** to be given **only** at the times and dates announced in the Prairie View A & M University Academic Calendar for Summer 2017 – 1st 5 week session. Students **must arrange** their schedule and activities so that they are prepared and **present for the final exam**.