



[BIOL 1025 General Biology]  
[Summer 2017]



- Instructor:** Dr. George E Brown  
**Section # and CRN:** P01 30127  
**Office Location:** 430F New Science  
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**Email Address:** [gebrown@pvamu.edu](mailto:gebrown@pvamu.edu)  
**Office Hours:** 12:00p.m.-12:50p.m. MTWR Room 106 Students may schedule a tutorial session time with the instructor 7:00p.m. on Monday, Tuesday, Wednesday, or Thursday in room 106. 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 A101 New Science Building
- Class Days & Times:** MTWR 8:00a.m. – 10:50a.m. MTWR and Laboratory sections P61 (30170) at 1:30pm-3:50pm MTWR
- Catalog Description:** [Basis of life, cell theory, cell structure, energy transformation, reproduction, genetic variability and origins of diversity of organisms]
- Prerequisites:** [Successful passage of BIOL 1015 General Biology I. Students must have a good understanding of the chemical context of life; water and life; carbon and the molecular diversity of life; the structure and function of large biological molecules; the structure and function of cells and their components; membrane structure and function; metabolism; cellular respiration and fermentation; photosynthesis; cell communication; the cell cycle and mitosis; meiosis and sexual life cycles; and an introduction to genetics. ]
- Co-requisites:** BIOL 1025 P61 (30170) laboratory section. BIOL 1025 is a combined lecture-laboratory course. Students must be enrolled in both the lecture section and a laboratory section[]
- Required Texts:** 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.masteringbiology.com](http://www.masteringbiology.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. The use of this web site is optional.

**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 required to maintain a notebook with all class handouts, graded exams, reports, and quizzes attached to the notebook
3. **Number 2 pencils** for exams
4. At least 8 each **SCANTRON forms 884-ES** (Answer choices for 200 questions) for each exam

**Student Learning Outcomes:**

	<b>Upon successful completion of this course, students will be able to:</b> <b>[NOTE: Begin each outcome with a verb]:</b>	<b>Program Learning Outcome # Alignment</b>	<b>Core Curriculum Outcome Alignment</b>
<b>1</b>	Conduct of laboratory investigations using safe, environmentally appropriate, and ethical practices.		
<b>2</b>	Understand the use of the scientific method during laboratory investigations. <ol style="list-style-type: none"> <li>a. Plan and implement investigative procedures including asking questions, formulating testable hypotheses, and selecting instruments and technology.</li> <li>b. Collect data, organize it, analyze it, evaluate, make inferences, and predict trends.</li> <li>c. Communicate valid conclusions.</li> </ol>		
<b>3</b>	Use critical thinking and scientific problem solving to make informed decisions. <ol style="list-style-type: none"> <li>a. Analyze, review, and critique scientific explanations, including hypotheses and theories using scientific evidence and information.</li> <li>b. Draw inferences based on data.</li> </ol>		
<b>4</b>	Understand cell communication and regulation of the cell cycle. <ol style="list-style-type: none"> <li>a. Understand the structure and functions of cellular receptors.</li> <li>b. Describe signal transduction and the cellular response.</li> <li>c. Explain how the cell cycle is regulated</li> </ol>		
<b>5</b>	Understand chromosomes, mitosis, and meiosis. <ol style="list-style-type: none"> <li>a. Explain chromosomes in terms of genes, loci, heterochromatin, euchromatin, and species number of chromosomes, sister chromatids, centromeres, and kinetochores.</li> <li>b. Describe the principle events of the stages of the eukaryotic cell cycle and how it is controlled.</li> <li>c. Diagram the process of mitosis.</li> <li>d. Draw the process of both stages of meiosis.</li> <li>e. Distinguish between asexual reproduction and sexual reproduction.</li> <li>f. Distinguish between haploid cells and diploid cells.</li> <li>g. Define homologous chromosomes.</li> </ol>		
<b>6</b>	Learn and understand the basic principles of heredity.		

	<ul style="list-style-type: none"> <li>a. Define and use correctly the terms allele, locus, genotype, phenotype, dominant, recessive, homozygous, heterozygous, monohybrid cross, dihybrid cross, trihybrid cross, and test cross.</li> <li>b. Apply the product rule and sum rule when predicting the outcomes of genetic crosses.</li> <li>c. Solve genetic problems involving complete dominance, incomplete dominance, epistasis, polygenes, multiple alleles, and X-linked inheritance.</li> <li>d. Explain some of the ways that genes may interact to affect the phenotype.</li> <li>e. Explain the genetic determination of sex.</li> </ul>		
<b>7</b>	<p>Understand how the structure of DNA forms the genetic codes for genes.</p> <ul style="list-style-type: none"> <li>a. Summarize the evidence observed in the 1950's demonstrating that DNA is the genetic material.</li> <li>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.</li> <li>c. Draw how the ribo-nucleotide subunits are bonded together to form RNA.</li> <li>d. Understand DNA transformation of bacteria, and bacteriophage DNA transduction of bacteria.</li> <li>e. Summarize the evidence that demonstrated semi-conservative replication of DNA.</li> <li>f. Explain the steps of DNA replication.</li> <li>g. Know each enzyme involved in DNA replication and its function.</li> <li>h. Compare the organization of DNA in prokaryotic and eukaryotic cells.</li> </ul>		
<b>8</b>	<p>Demonstrate by drawings an understanding of gene expression (transcription).</p> <ul style="list-style-type: none"> <li>a. Summarize the early evidence that most genes code for proteins.</li> <li>b. Outline the flow genetic information (central dogma) from DNA to Protein.</li> <li>c. Know the various types of RNA polymerases and how they catalyze the synthesis of RNA.</li> </ul> <p>Know the substrates and products of transcription</p>		
<b>9</b>	<p>Demonstrate an understanding of the substrates, products, enzymes and ribozymes involved in the steps of translation.</p> <ul style="list-style-type: none"> <li>a. Identify the features of tRNA that function in decoding the genetic information during translation.</li> <li>b. Explain how ribosomes function in protein synthesis.</li> <li>c. Diagram the processes of initiation, chain elongation, and chain termination in protein synthesis.</li> <li>d. Compare mRNA synthesis, modifications, and ribosome recognition sites in prokaryotes and eukaryotes.</li> </ul>		
<b>10</b>	<p>Demonstrate knowledge of regulation of gene expression.</p> <ul style="list-style-type: none"> <li>a. Explain the organization of bacterial genes into operons. Explain the function of each gene.</li> <li>b. Explain why some operons are inducible and others are repressible.</li> <li>c. Explain the role of repressors in the regulation of gene expression.</li> </ul>		

	<ul style="list-style-type: none"> <li>d. Differentiate between positive and negative control of operon gene expression.</li> <li>e. Draw the components of a eukaryotic gene and the DNA sequences that are involved in the regulation of transcription of that gene.</li> <li>f. Provide examples of DNA binding proteins and describe how they bind to DNA.</li> <li>g. Explain how transcriptional factors (proteins) facilitate transcription.</li> <li>h. Describe how a change in chromosomal structure affects which genes are expressed.</li> <li>i. Explain how one gene in a multicellular eukaryote might be able to produce different products in different types of cells.</li> <li>j. Describe types of regulatory controls that can be exerted in eukaryotes after the mature mRNA is formed.</li> </ul>		
<b>11</b>	<p>Demonstrate knowledge of DNA technologies and genetic engineering.</p> <ul style="list-style-type: none"> <li>a. Demonstrate how restriction enzymes cut DNA molecules and provide examples of how these restriction endonucleases are used in recombinant DNA technology.</li> <li>b. Summarize the properties of plasmids cloning vectors.</li> <li>c. Distinguish between a genomic library and a cDNA library.</li> <li>d. Describe uses for DNA hybridization probes.</li> <li>e. Explain how specific primers are used to amplify (replicate) specific genes from mixture genomic DNA or cDNA.</li> <li>f. Diagram the dideoxyribo-nucleotide triphosphates method of sequencing DNA.</li> <li>g. Provide a list of important proteins that have been produced by genetic engineering.</li> <li>h. Describe some transgenic plants and animals that been produced.</li> </ul>		
<b>12</b>	<p>Demonstrate knowledge of the human genome and human genetics.</p> <ul style="list-style-type: none"> <li>a. Define human genetics, human genome, bioinformatics, and pharmacogenomics.</li> <li>b. Determine the probable genotypes of the individuals in a pedigree.</li> <li>c. Distinguish between chromosomal abnormalities and single gene defects.</li> <li>d. Draw how non-disjunction may occur during meiosis to cause Down's syndrome, Klinefelter Syndrome, and Turner Syndrome.</li> <li>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.</li> <li>f. Describe how prenatal diagnosis is made by amniocentesis, chorionic villus sampling and ultrasound imaging.</li> </ul>		
<b>13</b>	<p>Demonstrate an understanding of how the regulation of gene expression controls development of multicellular organisms.</p>		

	<ul style="list-style-type: none"> <li>a. Distinguish between cell determination and cell differentiation.</li> <li>b. Describe evidence that demonstrated totipotency (nuclear equivalence) of some differentiated plant and animal cells.</li> <li>c. Explain the vertebrate cell lineage from zygote to germ layers to adult structures, organs and systems.</li> <li>d. Distinguish between the function of maternal effect genes, segmentation (zygotic) genes, and homeotic genes of animals.</li> <li>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.</li> <li>f. Define induction and programmed cell death and give examples of the roles they play in development.</li> </ul>		
<b>14</b>	<p>Demonstrate an understanding of how the regulation of gene expression controls development in eukaryotic organisms.</p> <ul style="list-style-type: none"> <li>a. Explain cell determination, differentiation, totipotency, nuclear equivalence, and cell lineage from zygote to adult structures</li> <li>b. Explain how the expression of maternal effect genes, segmentation genes, and homeotic genes control embryonic development</li> <li>c. Explain how cell signaling guides development</li> </ul>		
<b>15</b>	<p>Demonstrate an understanding of the diversity of living organisms and how they are classified in groups based on genetic inheritance.</p>		
<b>16</b>	<p>Demonstrate knowledge of viruses and the two prokaryotic domains.</p> <ul style="list-style-type: none"> <li>a. Explain the various types of viruses, viroids, and prions, and how they infect and replicate in specific host cells to cause diseases.</li> <li>b. Explain characteristics of the types of bacteria studied in chapter 23 and the function of the cell structures.</li> <li>c. Understand the metabolic and genetic diversity among bacteria.</li> </ul>		
<b>17</b>	<p>Demonstrate knowledge of the distinguishing characteristics of the representative protists covered in chapter 24.</p> <ul style="list-style-type: none"> <li>a. Demonstrate an understanding of the characteristics, diversity, ecological importance, economical importance, and medical importance of fungi and lichens.</li> </ul>		
<b>18</b>	<p>Explain how fungi are classified into four different phyla, their characteristics, how they reproduce, and their importance to humans.</p>		
<b>19</b>	<p>Demonstrate an understanding of the characteristics of seedless plants (bryophytes and vascular plants) and their life cycles. Demonstrate knowledge of the characteristics, life cycles of the seed plants.</p> <ul style="list-style-type: none"> <li>a. Explain the structure and function of leaves, stems, and roots of flowing plants.</li> <li>b. Describe reproduction in the flowing plants.</li> </ul>		
<b>20</b>	<p>Demonstrate knowledge of the characteristics of animals that are used to classify them into the various groups.</p> <ul style="list-style-type: none"> <li>b. Explain the distinguishing characteristics of each animal phylum studied in chapters 28, 29 and 30.</li> <li>c. Demonstrate knowledge of the anatomy and physiology of the animal body.</li> <li>d. Explain the structure and function of the various animal tissues.</li> <li>e. Explain the structure and function of the animal skin, skeletal, muscular, digestive, circulatory, respiratory, urinary, nervous, endocrine, and reproductive systems</li> </ul>		

21	<p>Demonstrate knowledge of how the interaction of animal genes with the environment contributes to foraging, social, sexual, and helping behavior.</p> <ol style="list-style-type: none"> <li>a. Demonstrate knowledge of how evolution (sexual reproduction and genetic mutations) produce offspring with genotypes that are different from that of their ancestors.</li> <li>b. Understand that over many generations the surviving diploid offspring with these new genes can express new (evolved) phenotypic traits that can reproductively isolate them from other offspring of their ancestors.</li> </ol>		
22	<p>Explain how evolution of new species was studied long before Charles Darwin by many religious scholars and naturalists that had no knowledge of genetics. Although they focused attention on the need to understand evolution, their ignorance of genetic caused them present explanations which confused people.</p> <ol style="list-style-type: none"> <li>a. Explain how Charles Darwin's plagiarism of Alfred Russel Wallace's manuscript combined with his ignorance of genetics, <b>confused the understanding of evolution</b> for over 150 years, <b>by publishing a book on evolution that excluded genetics</b>. Understand how his wealth and influence contributed to this problem. What can you learn from this?</li> <li>b. Explain the evidence for evolution which has been obtained from genomics, proteomics, molecular genetics, developmental biology, comparative anatomy, fossils and biogeography.</li> <li>c. Describe how the principles of genetics explain natural selection, homology, homoplasy, vestigial structures, survival of the fittest, and the modern theory of evolution.</li> </ol>		

## Major Course Requirements

### Method of Determining Final Course Grade

Course Grade Requirement	Value	Total
1) Exam 1,	6.25%	6.25
2) Exam 2,	6.25%	6.25
3) Exam 3,	6.25%	6.25
4) Exam 4,	6.25%	6.25
5) Exam 5,	6.25%	6.25
6) Exam 6,	6.25%	6.25
7) Exam 7,	6.25%	6.25
8) Exam 8,	6.25%	6.25
<b>Subtotal: 50%</b>		
9) <b>FINAL EXAM</b> (Covers chapters 18-21) Grade	50.00%	50.00
<b>Total:</b>	<b>100%</b>	<b>100</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:** [Demonstrate on the cumulative final exam that they can earn scores between 70% to 100%. Therefore students can earn up to 50% of their semester grade. ]

### Semester Calendar

#### Week One:

##### Topic Description

##### Readings:

[ UNIT 3 GENETICS]

M REVIEW Chapters 14, 15, 16, 17, and 18

T Read Chapter 19

W Exam 1 covers chapters 17- 19. Read for Lectures and Lab. Covering Chapters 19 and 20

R Read Chapter 20

##### Assignment (s):

M Study Quiz for Chapters 14-18

T Study Quiz for Chapter 19

W Study Quiz for Chapters 19 and 20

R Study Guide hand outs and quiz for chapter 20

#### Week Two:

##### Topic Description

##### Readings:

UNIT 3;

M Exam 2 covers chapters 17-20. Read for Lecture and Lab covering Chapter 21

T Read Chapter 21

W Exam 3 covers chapters 17-21. Read for Lecture and Lab covering UNIT 4

MECHANISMS OF EVOLUTION Chapters 22 and 23

R Read Chapters 23 and 24

Assignment (s):	M Chapter 21 study quiz and power point presentations T Study quiz and class handouts for chapter 21 W Study chapters 22 and 23 R Chapters 24 and 25 study quiz and class handouts
<b>Week Three:</b>	UNIT 5; THE EVOLUTIONARY HISTORY OF BIOLOGICAL DIVERSITY
Readings	M Exam 4 covers chapters 17-25. Read for Lecture and Lab covering chapters 26 and 27 T Read chapters 28 W Exam 5 covers chapters 17- 28. Read chapters 29 and 30 for Lecture and Lab. R Read chapter 31
Assignments	M Study quiz for chapters 26 and 27 T Study quiz for chapter 28 and class handouts W Study quiz for chapters 29 and 30, and class handouts R Study quiz for chapter 31 and class handouts
<b>Week Four:</b>	
Readings	M Exam 6 covers chapters 17-31. Read Chapter 32 T Read Chapter 33 W Exam 7 covers chapters 17-33. Read Chapter 34 R Read Chapter 34
Assignments	M Study quiz for chapter 32 T Study quiz for chapter 33 W Study quiz for chapter 34 and class handouts R Study quiz for chapter 34
<b>Week Five:</b>	
Readings	M Exam 8 covers chapters 17-34. Read Chapters 46 and 47 T Read Chapters 42 and 43 W Read Chapters 42 and 43 R Review for final exam on Friday August 12, 2016. <b>F FINAL EXAM</b> at 8:00a.m. in room A101
Assignments	M Study chapters 46 and 47 T Study chapter 42 and 43 W Study chapter 42 and 43 R Study for Final Exam

**Assignment Title or  
Grade Requirement**  
Score 70%-100%

**Description**

Standardized Cumulative Final Exam of chapters 14 to 34 and 40 to 51.



## Course Procedures or Additional Instructor Policies

### I. Type of Course:

This is part two of a comprehensive introduction of the concepts of modern Biology for students majoring in biology. Part one covered the organization and chemistry of living things, cell biology, energy transformations through living systems, cell signaling, multi-cellularity, and a large part of genetics (that included nucleic acid structure and function, gene expression, and gene regulation). Part two will cover mutation, DNA repair, cancer, mitosis and meiosis, simple patterns of inheritance, complex patterns of inheritance, genetics of bacteria and viruses, developmental genetics, genetic technology, genomes and proteomes, the diversity of life, the structure and life processes of plants and animals, evolution, and ecology.

This course is taught at the standards established for accredited universities. It should not be confused or compared with high school or junior college courses. In order to be successful, **students must understand that they are being graded and evaluated based on standards that require mastery of the contents of the course textbook and supplements.**

### II. Course Goals and Objectives:

The purpose of this course is to provide first year biology majors with sufficient current knowledge of biology that satisfies the prerequisite knowledge required for the pre-entry exams and applications to health profession schools, graduate biomedical programs, and teacher certification. **The outcome expectations for learners** are listed below in the next section.

The learning outlines are listed at the beginning of each chapter of the textbook. The daily assignment for students is to read the chapter outline in the student study guide (or make their own chapter outline) and then read the corresponding chapter in the textbook. Notes should be made in a **wire binder note book as the** student reads. This should enhance conceptualizing of biology topics and performance of the learning objectives. The questions at the end of each textbook chapter and those in the student study guide should be answered. Questions are provided at the end of each chapter for students to test their learned knowledge. The study guide provides chapter outlines and concepts review for each chapter

**The instructor conducts discussion type lecture classes.** It requires student participation in class discussions and demonstrations. Students are encouraged to enhance their knowledge by raising questions, responding to questions, and solving problems in front of the class.

**When you meet with your instructor in class or for study help, bring your biology course notebook with all graded exams and the course textbook. These items will support your learning.**

### III. Course Evaluation Methods:

The University's Academic Catalog grading policy is used. **All lecture exams will be cumulative in terms of the topics that will be included on tests.** Unit exams are not administered. **Each exam covers all chapters taught from the first class day to the last chapter** studied prior to the exam. The laboratory mid-term average and the final laboratory average will count as lecture exams. The semester average of all lecture exams will constitute fifty percent (50%) of the final semester grade. **The cumulative final exam will constitute the remaining 50% of the final semester grade.**

The goal is to administer at least eight cumulative exams for the semester **in classroom A101.** The date for each exam will be each Monday and Wednesday and the instructor will announce the time and room at least two days prior to the administration of the exam. However, unannounced quizzes are given during selected lectures for the purpose of evaluating how well students are learning the most recently taught concepts. The **final exam** for this course is scheduled by the University for **8:00a.m., Friday, August 11, 2017 in room 104, New Science Building.** It will test

all topics covered during the semester. Arrange your schedule to take the final exam on time. We cannot give the final exam before or after this set time. **Please do not request to take your final exam at a different time.**

**MAKE-UP EXAMS:** Students are **strongly advised to take exams at the announced scheduled time.** Over 30 years of analysis of test results have demonstrated that students make higher grades when they take Dr. Brown's exams at the regular testing period. Over **99% of the students that took make-up exams failed them.** Make-up exams are different from the regular exams. They require students to demonstrate their knowledge in more specific terms because students would have had access to the regular test and its answers. **Take exams at the scheduled time.** Students may request a make-up exam for the one that was missed. However, the instructor will schedule the time and place for the make-up exam which will not interrupt class lectures and laboratories. Students that are scheduled for a make-up exam and fail to take it will not be provided a second chance to take the exam.

#### IV. Class Attendance:

The University's attendance policy requires students to be present for each scheduled class. Students with or without official excuses for missing class are responsible for obtaining the class notes and learning the concepts covered in class while they were absent. They will be tested on the same topics as students with perfect attendance. The class attendance is taken at each class. **Excessive absenteeism will contribute to the lowering of the student's final semester grade.**

#### V. Conduct That Is Not Allowed In Class:

1. **Cellular phones, 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. These are **instruments of cheating.** They **must be turned off** and locked in your book bag so that they can't be seen or used during any part of this course. Students that are caught using these or any instruments of cheating **will be charged with cheating** and therefore earn a failing grade. See item 2 below concerning cheating.
2. **No cheating on exams, quizzes, reports, or any graded activity.** Failing grades (zero) are assigned to students that cheat. **This classroom has a video camera which will videotape exams. These tapes can be used as evidence of student cheating.** Please go to the rest room before starting your exam. Once a student leaves the classroom during an exam they will not be permitted to return to that exam. Students are not permitted to communicate with each other during an exam. Therefore students can't talk to, pass written materials to, or show answers or questions to other students in the class. Laboratory reports and presentations must be the work of the individual student. **Evidence of copying your work from others, including the world wide net, is cheating. Students should read the section on Offenses and Appropriate Disciplinary Actions in the current PVAMU web site catalog.** This is referred to in section XII below.
3. **No Smoking.** Smoking is not allowed in the New Science Building.
4. **No Eating is Class:** Food and beverages are not allowed in the classrooms. Do not bring food into the class room.
5. 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. Please do not insult and disrespect the class by violating this cultural academic practice.

#### VI. Course Outline:

PART	CHAPTERS
3	Genetics
14	Mendel and the Gene Idea REVIEW

15	Chromosomal Basis of Inheritance REVIEW
16	The molecular Basis of Inheritance REVIEW
17	From Genes to Proteins REVIEW
18	Regulation of Gene Expression REVIEW
19	Viruses
20	Biotechnology
21	Genomes and Their Evolution
4	Mechanisms of Evolution
22	Descent with Modification: A Darwinian View of Life
23	The Evolution of Populations
24	The Origin of Species
25	The History of Life on Earth
5	The Evolutionary History of Biological Diversity
26	Phylogeny and the tree of Life
27	Bacteria and Archaea
28	Protists
31	Fungi
32	An Overview of Animal Diversity
33	An Introduction to vertebrates
34	The Origin and Evolution of Vertebrates
7	Animal Form and Function (REFERENCE CHAPTERS)
40	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
8	Ecology (REFERENCE CHAPTERS)
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 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.

## **XII. Semester Calendar**

The Academic Calendar for fall 2014 is published in the University's web site and Registration Bulletin which can be accessed by students.

1. Instruction begins for this class on **Tuesday, July 11, 2017**
2. Late Registration and Drop/Add Ends for Undergraduate Students: Friday, July 14, 2017
3. Last day to withdraw from a class with automatic "W": Friday, August 4, 2017
4. Course Review Day: Thursday, August 10, 2017

5. 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 2017 Summer University Final Exam Schedule. Students **must arrange** their schedule and activities so that they are prepared and **present for the final exam.** **The cumulative final exam** is scheduled for 8:00a.m. – 10:00a.m., **Friday, August 11, 2017** in room 104.