



SYLLABUS

[BIOL 1015 General Biology] [Fall 2019]



Instructor: Dr. George E. Brown
Section # and CRN: P01 and 12678
LAB P81 and 12811

Office Location: 430F New Science
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Office Hours: MWF 9:10a.m.-10:10a.m., and 5:10p.m. – 6:10p.m. in room 106 New Science.
TR 3:00p.m.-4:50p.m in room 106 New Science.

Students may schedule a tutorial session with the instructor by making the request in class so that all students have the opportunity to participate at the following time:

Mode of Instruction: [Face to Face which encourages student engagement in discussion of course content topics]

Course Location: Room A101 New Science Building

Class Days & Times: MWF 8:00a.m.-8:50a.m. In Room A101 for lecture.

TR BIOL 1015 P81 Laboratory Section meets at 8:00a.m.-9:50a.m. in either room 315 or room 106 as announced by the instructor

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

Prerequisites: [Course is designed for Biology majors and minors. Non-biology majors should be aware of the challenges offered in this 5 credit hour course]

Co-requisites: BIOL 1015 is a combined lecture-laboratory course therefore students must be enrolled in both the BIOL 1015-P01 12678 lecture section and the BIOL 1015-P81 12811 laboratory section

Required Texts: Campbell Biology, **ELEVENTH Edition**, by Lisa A. Urry, Michael L.Cain, Steven A. Wasserman, Peter V. Minorsky, and Jane B. Reece, ISBN -10: 0-134-09341-0; or ISBN 13: 978-0-134-09341-3 Student Edition

Recommended Texts: Supplements: (Optional)
1. Study Guide, Eleventh Edition 978-0-134-44377-5/0-134-44377-2 this study aid provides concept maps, chapter summaries, word roots, and a variety of

interactive activities, including questions and answers.

2. Inquiry to Action: Interpreting Scientific Papers, Fourth Edition by Ruth V. Buskirk. ISBN 978-0-134-47861-6/ 0-134-47861-4 this guide helps students learn how to read and understand scientific research articles accompanied by questions that help students analyze the articles.
3. Practicing Biology: A Student Workbook, Sixth Edition by Jane Heitz and Cynthia Giffen. ISBN: 978-0-134-48603/ 0-134-48603-X. This textbook offers activities to suit different learning styles.
4. Biological Inquiry: A Workbook of Investigative Cases Fifth edition By Margaret Waterman. ISBN: 978-0-134-48646-8/ 0-134-48646-3. Each case requires students to synthesize information from multiple chapters of the textbook and apply that knowledge to a real world scenario as they pose hypotheses, gather new information, analyze evidence, graph data, and draw conclusions. A link to a student website is in the Study Area in *MasteringBiology*
5. Study Card, Eleventh Edition: ISBN: 978-0-134-48648-2/ 0-134-48648-X
6. Get Ready for Biology by Lori K. Garrett. ISBN: 978-0-32150057-1/0-321-50057. This workbook helps students to brush-up on math and study skills in order to understand biological terminology and the basics of chemistry and cell biology. This is also provided in *MasteringBiology*

Materials needed to enhance learning biology:

1. Students must read the Required Course Textbook chapters prior to class and be prepared to be engaged and quizzed by the instructor on information covered in the textbook chapters.
2. Students are required to maintain a folder with all class notes, handouts, graded exams, reports, and quizzes.
3. **Number 2 pencils** for exams and at least
4. At least 14 each **SCANTRON forms 884-ES** (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	Students will be able to demonstrate their understanding of biological laboratory investigations using safe, environmentally appropriate, and ethical practices.	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
2	Students will be able to demonstrate Understanding of the use of the scientific method employed in the conduct of laboratory investigations by: Planning and implementing investigative procedures including asking questions, formulating testable hypotheses, and the use of required instruments and technology. Understanding how to collect data, organize it, analyze it, evaluate, make inferences, and predict trends.	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility

	Communicate valid conclusions in required presentations		
3	Students will be able to demonstrate the use critical thinking and scientific problem solving to make informed decisions in the following ways: Analyze, review, and critique scientific explanations, including hypotheses and theories using scientific evidence and information. Draw inferences based on data.	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
4	Students will be able to describe the characteristics of living things that distinguish them from non-living things in the following ways: Describe the hierarchy of biological organization. Contrast the six kingdoms of living things and know examples of each. Summarize the role and examples of producers, consumers, and decomposers.	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
5	Students will be able to demonstrate an understanding of the chemical basis of life by: Naming the principle elements in living things and provide a function of each. Learning 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. Distinguishing between atomic number and atomic mass. Explaining how the number of valence electrons of an atom is related to its chemical properties. Comparing the mechanisms by which ionic bonds, covalent bonds, and hydrogen bonds are formed. Explaining how cations and anions form and how they interact. Distinguishing between oxidation and reduction. Showing 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. Converting the hydrogen ion concentration (moles/liter) of a solution to a pH value. Contrasting acids, bases, and salts. Describe the composition of salts and why they are important to organisms.	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
6	Students will be able to demonstrate an understanding of the four types of organic molecules in the following ways: Distinguishing between organic molecules and inorganic compounds. Describing the properties of carbon that make it the central atoms of organic compounds. Distinguishing between the three types of isomers. Identifying the major functional groups that present in certain organic molecules. Learning 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. Understanding biological function of each type of organic molecules organic molecules studied. Drawing the structures of amino acids, explain how they are grouped according to their radical, group, and explain the levels of protein structure. Drawing the chemical structures of ribonucleotides and deoxy-ribonucleotides to include the purines, pyrimidines, pentoses, and phosphate groups. Drawing the structure of DNA and RNA.	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility

7	<p>Students will be able to demonstrate why the cell is the basic unit of life and describe the cell theory by: Comparing and contrasting the characteristics of prokaryotic and eukaryotic cell. Explaining why the relationship between surface area and volume of a cell determines its efficiency and entrance into cell division. Describing the structure and function of the various bacterial cell structures. Describing the structure and function of eukaryotic cell structures and organelles Explaining the methods used to study cells. Tracing the path of proteins synthesized in the rough endoplasmic reticulum as they are processed, modified and transported to specific destinations. Comparing the functions of mitochondria and chloroplasts. Explaining the structure and function of microtubules, intermediate filaments, and actin filaments and their importance to cells and animal tissues. Describing how flagella, cilia, pseudopods, actin and myosin function in cellular and animal movement.</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
8	<p>Students will be able to demonstrate Knowledge the phospholipids bilayer structure and function of biological membranes in the following ways: Explaining the importance of cellular membranes and their functions. Explaining how the various classes of membrane proteins associate with phospholipids bilayer and discuss the role of each class of proteins. Describing the passage of materials through the membranes by diffusion, osmosis, facilitated diffusion, active transport, endocytosis, and exocytosis. Understanding how cells communicate by cell signaling. Demonstrating how cell form tissues and how the various cell junctions connect cells.</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
9	<p>Students will be able to demonstrate Knowledge of the laws of thermodynamics that apply energy transformations in living systems by: Knowing how ATP and GTP are the energy currency of cells. Understanding how organic catalyst such as enzymes and ribozymes speed up specific chemical reactions in cells. Knowing how the various enzymes function and how they are regulated.</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
10	<p>Students will be able to demonstrate an understanding of the four stages of aerobic respiration by: Knowing the enzyme catalyzed reaction steps in stage I of glycolysis and stage II of glycolysis. Drawing the substrates and products of each step of glycolysis. Drawing the enzyme, substrate and products of the conversion of pyruvate to acetyl CoA. Drawing the enzymes, substrates, and products of each step of the citric acid cycle. Conceptualizing the energy conversions of each step of the electron transport chains and the coupled oxidative phosphorylation.</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
11	<p>Students will be able to demonstrate knowledge of photosynthesis in the following ways: Knowing how covalent bonds of water are disrupted during the light dependent reaction and the three products are produced. Knowing how ATP is formed by chemiosmosis. Demonstrate by drawing the enzyme catalyzed steps of the Calvin Cycle to include the substrates and products. Drawing the substrates and products of each step of the synthesis of alpha glucose from two glyceraldehydes 3-phosphate (G3P) molecules.</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility

12	<p>Students will be able to demonstrate an understanding of cell communication and regulation of the cell cycle in the following ways:</p> <p>Understanding the structure and functions of cellular receptors.</p> <p>Describing signal transduction and the cellular response.</p> <p>Explaining how the cell cycle is regulated.</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
13	<p>Students will be able to demonstrate knowledge of chromosomes, mitosis, and meiosis by:</p> <p>Explaining chromosomes in terms of genes, loci, heterochromatin, euchromatin, and species number of chromosomes, sister chromatids, centromeres, and kinetochores.</p> <p>Describing the principle events of the stages of the eukaryotic cell cycle and how it is controlled.</p> <p>Diagraming the process of mitosis.</p> <p>Drawing the process of both stages of meiosis.</p> <p>Distinguishing between asexual reproduction and sexual reproduction.</p> <p>Distinguishing between haploid cells and diploid cells.</p> <p>Defining homologous chromosomes.</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
14	<p>Students will be able to demonstrate knowledge of the basic principles of heredity in the following ways:</p> <p>Defining and using correctly the terms allele, locus, genotype, phenotype, dominant, recessive, homozygous, heterozygous, monohybrid cross, dihybrid cross, trihybrid cross, and test cross.</p> <p>Applying the product rule and sum rule when predicting the outcomes of genetic crosses.</p> <p>Solving genetic problems involving complete dominance, incomplete dominance, epistasis, polygenes, multiple alleles, and X-linked inheritance.</p> <p>Explaining some of the ways that genes may interact to affect the phenotype.</p> <p>Explaining the genetic determination of sex.</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
15	<p>Students will be able to demonstrate knowledge of the structure of DNA determines the genetic codes of genes in the following ways:</p> <p>Summarizing the evidence observed in the 1950's which demonstrated that DNA was the genetic material.</p> <p>Drawing how the four types of deoxyribo-nucleotide subunits are bonded together to form the structure of DNA. State the base pairing rule for DNA.</p> <p>Drawing how the ribo-nucleotide subunits are bonded together to form RNA.</p> <p>Understanding DNA transformation of bacteria</p> <p>Understanding bacteriophage DNA transduction of bacteria.</p> <p>Summarizing the evidence that demonstrated semi-conservative replication of DNA.</p> <p>Explaining the steps of DNA replication showing catalytic function of each enzyme involved in DNA replication and its function.</p> <p>Comparing the organization of DNA in prokaryotic and eukaryotic cells.</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
16	<p>Students will be able to demonstrate by drawings and explanations knowledge of gene expression (transcription) in the following ways:</p> <p>By summarizing the early evidence that most genes code for proteins.</p> <p>Outlining the flow genetic information from DNA to Protein (central dogma).</p> <p>Describing the various types of RNA polymerases and how they catalyze the synthesis of specific RNA molecules.</p> <p>Knowledge the substrates and products of transcription</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility
17	<p>Students will be able to demonstrate an understanding of the substrates, products, enzymes and ribozymes involved in the steps of translation by:</p> <p>Identifying the features of tRNA that function in decoding the genetic</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving

	<p>information during translation.</p> <p>Explaining how ribosomes function in protein synthesis.</p> <p>Explaining the processes of initiation, chain elongation, and chain termination in protein synthesis.</p> <p>Comparing mRNA synthesis, modifications, and ribosome recognition sites in prokaryotes and eukaryotes.</p>		<p>Personal and Social Responsibility</p>
18	<p>Students will be able to demonstrate knowledge of regulation of gene expression in the following ways:</p> <p>Explaining the organization of bacterial genes into operons.</p> <p>Explaining the function of each gene.</p> <p>Explaining why some operons are inducible and others are repressible.</p> <p>Explaining the role of repressors in the regulation of gene expression.</p> <p>Differentiating between positive and negative control of operon gene expression.</p> <p>Explaining the components of a eukaryotic gene and the DNA sequences that are involved in the regulation of transcription of that gene.</p> <p>Providing examples of DNA binding proteins and describe how they bind to DNA.</p> <p>Explaining how transcriptional factors (proteins) facilitate transcription.</p> <p>Describing how a change in chromosomal structure affects which genes are expressed.</p> <p>Explaining how one gene in a multicellular eukaryote might be able to produce different products in different types of cells.</p> <p>Explaining the types of regulatory controls that can be exerted in eukaryotes after the mature mRNA is formed.</p>	<p>All core outcomes 1, 2, 3, 4</p>	<p>Critical Thinking Communication Problem Solving Personal and Social Responsibility</p>
19	<p>Students will be able to demonstrate knowledge of DNA technologies and genetic engineering by:</p> <p>Demonstrating how restriction enzymes cut DNA molecules and provide examples of how these restriction endonucleases are used in recombinant DNA technology.</p> <p>Describing the properties of plasmids other cloning vectors.</p> <p>Distinguishing between a genomic library and a cDNA library.</p> <p>Describing the uses for DNA hybridization probes.</p> <p>Explaining how specific primers are used to amplify (replicate) specific genes from mixture genomic DNA or cDNA.</p> <p>Explaining and comparing the various methods of sequencing DNA.</p> <p>Naming at least ten important proteins that have been produced by genetic engineering and the method employed.</p> <p>Describing the production of the transgenic plants and animals presented in the textbook.</p>	<p>All core outcomes 1, 2, 3, 4</p>	<p>Critical Thinking Communication Problem Solving Personal and Social Responsibility</p>
20	<p>Students will be able to demonstrate knowledge of the human genome and human genetics in the following ways:</p> <p>Explaining human genetics, human genome, bioinformatics, and pharmacogenomics.</p> <p>Determining the probable genotypes of the individuals in a pedigree.</p> <p>Distinguishing between chromosomal abnormalities and single gene defects.</p> <p>Explaining how non-disjunction may occur during meiosis to cause Down's syndrome, Klinefelter Syndrome, and Turner Syndrome.</p> <p>Explaining 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.</p> <p>Explaining how prenatal diagnosis is made by amniocentesis, chorionic villus sampling and ultra-sound imaging.</p>	<p>All core outcomes 1, 2, 3, 4</p>	<p>Critical Thinking Communication Problem Solving Personal and Social Responsibility</p>

21	<p>Students will be able to demonstrate an understanding of how the regulation of gene expression controls development of multicellular organisms by:</p> <p>Distinguishing between cell determination and cell differentiation.</p> <p>Describing the evidence that demonstrated totipotency (nuclear equivalence) of some differentiated plant and animal cells.</p> <p>Explaining the vertebrate cell lineage from zygote to germ layers to adult structures, organs and systems.</p> <p>Distinguishing between the function of maternal effect genes, segmentation (zygotic) genes, and homeotic genes of animals.</p> <p>Explaining 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.</p> <p>Explaining induction and process of apoptosis (programmed cell death) and give examples of the roles they play in development.</p>	All core outcomes 1, 2, 3, 4	Critical Thinking Communication Problem Solving Personal and Social Responsibility

Major Course Requirements

Method of Determining Final Course Grade

Course Grade Requirement	Value	Total
1) Exam 1, Tuesday, 9/10/19 Chapters 1-4	4.16%	4.16
2) Exam 2, Tuesday, 9/17/19 Chapters 1-5	4.16%	4.16
3) Exam 3, Tuesday, 9/24/19 Chapters 1-6	4.16%	4.16
4) Exam 4, Tuesday, 10/01/19 Chapters 1-7	4.16%	4.16
5) Exam 5, Tuesday, 10/08/19 Chapters 1-9	4.16%	4.16
6) Exam 6, Tuesday 10/15/19 Chapters 1-10	4.16%	4.16
7) Exam 7 Tuesday, 10/22/19 Chapters 1-12	4.16%	4.16
8) Exam 8 Tuesday, 10/29/19 Chapters 1-14	4.16%	4.16
9) Exam 9 Tuesday, 11/05/19 Chapters 1-16	4.16%	4.16
10) Exam 10 Tuesday 11/12/19 Chapters 1-18	4.16%	4.16
11) Exam 11 Tuesday 11/19/19 Chapters 1-19	4.16%	4.16
12) Exam 12 Tuesday 11/26/19 Chapters 1-20	4.16%	4.16
13) FINAL EXAM (Covers all chapters taught) Grade	50.00%	50.00
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: [1. Students must demonstrate on the 12 cumulative semester exams that they can earn average scores of 70% to 100%. Each exam has a maximum value of 4.166%. Students can earn between zero percent to 50% on each semester exam.

2. Students must demonstrate on the cumulative final exam that which has a maximum value of 50% that they can earn scores of 70% to 100%.

3. Therefore students can earn a combined semester grade (the ten semester exams + the final exam) between zero percent to 100% which determines the final semester grade.]

Assignment Title or Grade Requirement

Students must score between 70% and 100% on the final exam

Description

Students should be able to demonstrate achievement of the outcome expectations of this course by scoring at least 70% on the standardized cumulative final exam covering all textbook chapter topics taught.

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. This is the first semester course of a comprehensive introduction of the concepts of modern biology for freshmen biology majors. It covers the chemical basis of life, organization of cells, biological membranes, cell communication system, energetics and metabolism, how cells make ATP, energy releasing pathways, photosynthesis, regulation of the cell cycle, mitosis, meiosis, principles of heredity, DNA structure, regulation of gene expression, DNA Technology, genomics, and developmental genetics. The second semester course, BIOL 1025, is taught in the next semester. It covers the diversity of life, evolution, structure and life processes in plants and animals, and ecology. The **outcome expectations for learners** are listed above.

II. Type of Course:

The course instructor conducts discussion type classes in order to engage students to demonstrate their knowledge learned from reading the textbook. These classes require student participation and demonstrations. The instructor 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. Students must 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 **chapter's study objectives**. 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. This 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 request.**

III. EXAMS

All exams are cumulative covering course topics taught from the first day of class to the day of the exam.

Twelve semester exams are tentative scheduled based on the pace of the course and activities imposed by the University's Administration as follows:

Exam 1, Tuesday, September 10, 2019

Exam 2, Tuesday, September 17, 2019

Exam 3, Tuesday, September 24, 2019

Exam 4, Tuesday, October 01, 2019

Exam 5, Tuesday, October 08, 2019

Exam 6, Tuesday, October 15, 2019

Exam 7, Tuesday, October 22, 2019

Exam 8, Tuesday, October 29, 2019

Exam 9, Tuesday, November 05, 2019

Exam 10, Tuesday, November 12, 2019

Exam 11, Tuesday, November 19, 2019

Exam 12, Tuesday, November 26, 2019

The cumulative final exam for section P01 (MWF 8:00a.m.) is scheduled for 8:00a.m. – 10:00a.m., **Wednesday, December 4, 2019** in room A101.

Final exams are required to be given **only** at the times and dates announced in the 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 40 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.** The Department of Biology has an honor code which all students enrolled in this course are required to read and sign.
- c. Students enrolled in this course are not permitted to wear hats, caps, head rags, helmets, hoods or any type of hear gear in the class rooms for this course. Dress for success.

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Semester Calendar

[INTRODUCTION and Unit 1; THE CHEMISTRY OF LIFE]

Week One:
Topic Description
Readings for:

Monday (M) Chapters 1 and 2
Tuesday (T) Chapters 2
Wednesday (W) Chapter 2
Thursday (R) Chapter 2
Friday (F) Chapter 2

Assignment (s):

M Study Quiz for Chapter 1 on **e-course**
T Study Quiz for Chapter 2 on **e-course**
W Study Quiz for Chapter 2 on e-course
R Study guide and quiz for chapter 2 on e-course
F Study quiz for chapter 3 on e-course

Week Two:
Topic Description
Readings:

Unit 1; THE CHEMISTRY OF LIFE and Unit 2 THE CELL

T Chapter 3
W Chapter 3
R Chapter 4
F Chapter 4

Assignment (s):

T Chapter 3 study guide and quiz on e-course
W Chapter 3 study guide and quiz on e-course
R Chapter 4 study guide and quiz on e-course
F Chapter 4 study guide and quiz on e-course

Week Three:
Topic Description
Readings:

Unit 1; THE CHEMISTRY OF LIFE and Unit 2; THE CELL

M Chapter 4
T Exam 01, Chapters 1-4
W Chapter 5
R Chapter 5
F Chapters 5

Assignment (s):

M Chapter 4 study guide and quiz on e-course
T Chapter 5 study guide and quiz on e-course
W Chapter 5 study guide and quiz on e-course
R Chapter 5 study guide and quiz on e-course
F Chapter 5 study guide and quiz on e-course

Week Four:
Topic Description

Unit 2, THE CELL

M Chapter 5
T Exam 02 Chapters 1-5
W Chapter 6
R Chapter 6
F Chapter 6

Readings:

Assignment (s):

M Chapter 5 study guide and quiz on e-course
T Chapter 6 study guide and quiz on e-course
W Chapter 6 study guide and quiz on e-course
R Chapter 6 study guide and quiz on e-course
F Chapter 6 study guide and quiz on e-course

Week Five:

Topic Description

Unit 2, THE CELL
M Chapter 6
T Exam 03 Chapters 1-6
W Chapter 7
R Chapter 7
F Chapter 7

Readings:

Assignments (s):

M Chapter 6 study guide and quiz on e-course
T Chapter 7 study guide and quiz on e-course
W Chapter 7 study guide and quiz on e-course
R Chapter 7 study guide and quiz on e-course
F Chapter 7 study guide and quiz on e-course

Week Six:

Topic Description

Unit 2, THE CELL
M chapter 7
T Exam 04 chapters 1-7
W Chapter 8
R Chapter 9
F Chapter 9

Readings:

Assignment(s)

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

Week Seven:

Topic Description

Unit 2, THE CELL
M Chapter 9
T Exam 05 Chapters 1-9
W Chapter 10
R Chapter 10
F Chapter 10

Readings:

Assignment (s):

M Chapter 9 study guide and quiz on e-course
T Chapter 10 study guide and quiz on e-course
W Chapter 10 study guide and quiz on e-course
R Chapter 10 study guide and quiz on e-course
F Chapter 10 study guide and quiz on e-course

Week Eight:

Topic Description

Readings:

Unit 2, THE CELL and Unit 3, GENETICS
M Chapter 10
T Exam 06 Chapters 1-10
W Chapter 11
R Chapter 11
F Chapters 12

Assignment (s): M Chapter 10 study guide and quiz on e-course
T Chapter 11 study guide and quiz on e-course
W Chapter 11 study guide and quiz on e-course
R Chapter 12 study guide and quiz on e-course
F Chapter 12 study guide and quiz on e-course

Week Nine:
Topic **Description**
Readings:

Unit 3, GENETICS
M Chapter 12
T Exam 07 Chapters 1-12
W Chapter 13
R Chapter 13
F Chapters 14

Assignment (s): M Chapter 12 study guide and quiz on e-course
T Chapter 13 study guide and quiz on e-course
W Chapter 13 study guide and quiz on e-course
R Chapter 14 study guide and quiz on e-course
F Chapter 14 study guide and quiz on e-course

Week Ten:
Topic **Description**
Readings:

Unit 3, GENETICSL
M Chapter 14
T Exam 08 Chapters 1-14
W Chapter 15
R Chapter 15
F Chapters 16

Assignment (s): M Chapter 14 study guide and quiz on e-course
T Chapter 15 study guide and quiz on e-course
W Chapter 16 study guide and quiz on e-course
R Chapter 16 study guide and quiz on e-course
F Chapter 16 study guide and quiz on e-course

Week Eleven:
Topics **Description**
Readings:

Unit 3, GENETICS
M Chapter 16
T Exam 09 Chapters 1-16
W Chapter 17
R Chapter 17
F Chapter 18

Assignment (s) M Chapter 16 study guides and quiz on e-course
T Chapter 17 study guide and quiz on e-course
W Chapter 17 study guide and quiz on e-course
R Chapter 18 study guide and quiz on e-course
F Chapter 18 study guide and quiz on e-course

Week Twelve:
Topic **Description**

Unit 3; GENETICS
M Chapter 18
T Exam 10 Chapters 1-18
W Chapter 19
R Chapter 19
F Chapters 20

Readings: M Chapter 18 study guide and quiz on e-course
T Chapter 19 study guide and quiz on e-course
W Chapter 19 study guide and quiz on e-course
R Chapter 20 study guide and quiz on e-course
F Chapter 20 study guide and quiz on e-course

Week Thirteen:
Topic **Description**
Readings: Unit 3 GENETICS and Unit 4 EVOLUTION
M Chapter 19
T Exam 11 Chapters 1-19
W Chapter 20
R Chapter 20
F Chapter 20

Assignment (s): M Chapter 19 study guide on e-course
T Chapter 20 study guide on e-course
W Chapter 20 study guide on e-course
R Chapter 20 study guide on e-course
F Chapter 20 study guide on e-course

Week Fourteen:
Topic **Description**
Readings: Unit 4 EVOLUTION
M Chapter 20
T Exam 12 Chapters 1-20
W Assigned selective topics in chapters 21-32
R Assigned selective topics in chapters 21-32
F Assigned selective topics in Chapters 21-32

Assignment (s): M Chapter 20 study guide on e-course
T Read and complete assigned topics in chapters 21-32
W Read and complete assigned topics in chapters 21-32
R Read and complete assigned topics in chapters 21-32
F Read and complete assigned topics in chapters 21-32

Week Fifteen:
Topic **Description**
M Review for final exam
T Study and review for final exam
W FINAL EXAM, Wednesday, December 4, 2019 7:00a.m. -10:00a.m.
Chapters 1 to 20

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 for Online Courses:

Online courses often require minimal to non-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. 2018 Fall Semester Calendar

The Academic Calendar for fall 2018 is published in the University's web site and in the fall semester Course Registration Bulletin which can be accessed by students.

1. Instruction begins for this class on **Monday, August 26, 2019**
2. Late Registration for the fall semester ends by 5:00p.m., Friday, August 30, 2019
3. Add/Drop for all students ends by 5:00p.m. for all students on Friday, August 30, 2019.
4. Labor Day Holiday (University is closed), Monday September 2, 2019 Class resumes, Tuesday, September 3, 2019
5. Last day to withdraw from a course without it being part of the academic record, Wednesday, September 11, 2019
6. Withdrawal from courses between Thursday, September 12 and November 01, 2019 will earn a "W" on the academic record.
7. **Mid-Semester Exam: Tuesday, October 15, 2019**
8. Biology majors should start their intensive **Study Schedule** for their very important Final Exams by Wednesday, November 13, 2019 and continue until the start of final exams on Wednesday, December 4, 2019.
9. Thanksgiving is a Student Holiday that occurs Thursday- Saturday, November 28- 30, 2019. **Only two class days remains before the start of final exams on Wednesday, December 4, 2019**
10. Course Review Day: Monday, December 2, 2019 and Tuesday, December 3, 2019

11. Last day to withdraw from the University: Tuesday, December 3, 2019.
12. **The cumulative final exam** for section BIOL 1015 P01 is scheduled for 8:00a.m. – 10:00a.m., **Wednesday, December 4, 2019** in room A101. 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 2019 Fall University Final Exam Schedule. Students **must arrange** their schedule and activities so that they are prepared and **present for the final exam**.