

SYLLABUS

BIOL 1025 General Biology II Spring 2019

Instructor: Harriette Howard-Lee Block, Ph.D.
Section # and CRN: P02 CRN 26362 and P62 CRN 27168

Office Location: Elmer E. O'Banion Science Building Room 430C

Office Phone: 936-261-3160 FAX: 936-261-3179

Email Address: hlblock@pvamu.edu

Office Hours: M and W 9:00 am - 11:00 am

Mode of Instruction: Face-to Face

Course Location: O'Banion Science – 104 (Lecture) and 315 (Lab)

Class Days & Times: MWF Lecture: 12 noon – 12:50pm and F Lab 7:00 am – 10:50 am

Catalog Description: General Biology 1025, (3-4) Credit 5 semester hours. Structure and function of living

organism systems. Ecological relationships, natural selection, evolution and human

ecology.

Prerequisites: TSIA Reading College Ready

Co-requisites:

Required Texts: Biology, 11th Edition, by Reece, Urry, Cain, Wasserman, Minorsky and Reece

ISBN -13:978-0-134-09341-3

Recommended

Texts:

Student Learning Outcomes:

	Upon successful completion of this course, students will be able to:	Program Learning Outcome # Alignment	Core Curriculum Outcome Alignment
1	Demonstrate an understanding of the basic principles of heredity	1, 3	Discipline Specific Knowledge
2	Demonstrate by drawings and understanding of transcription, translation and gene expression	1, 3 and 4	Discipline Specific Knowledge
3	Demonstrate knowledge of DNA technologies and genetic engineering	1, 3 and 4	Integration of Broad Knowledge
4	Demonstrate knowledge of genetic principles	1, 3 and 4	Discipline Specific Knowledge
5	Demonstrate knowledge of viruses and prokaryotes	3	Discipline Specific Knowledge
6	Demonstrate critical thinking skills and scientific problem solving skills to	1, 5	Critical Thinking,

	make informed decisions.		Problem Solving
7	Demonstrate laboratory investigations using safe, environmentally	5	Ethical Decision
	appropriate and ethical practices		Making and
			Problem Solving
8	Compose an oral scientific presentation using the scientific method	5	Communication,
			Globalization and
			Cultural Diversity

Major Course Requirements

Method of Determining Final Course Grade

Course Grade Requirement	Value	Total	
1) Major Exams (3)	60%	600	
2) Final Exam	20%	200	
3) Quizzes	Extra Credit		
Laboratory Exams	20%	200	
Total:	100%	1000pts	

Grading Criteria and Conversion

A = 100-90pts. B = 89-80pts C = 79-70pts D = 69-60pts F = 59-60pts

Detailed Description of Major Assignments:

Assignment Title or

Grade Requirement
Chapters 14 and 15
Chapters 16 and 17
Chapters 18 and 19
Chapters 20 and 29
Description
Exam 1
Exam 2
Exam 3
Final Exam

Course Procedures or Additional Instructor Policies

Taskstream

Taskstream is a tool that Prairie View A&M University uses for assessment purposes. One of your assignments may be considered an "artifact," an item of coursework that serves as evidence that course objectives are met. More information will be provided during the semester, but for general information, you can visit Taskstream via the link in eCourses.

Semester Calendar (Tentative)

Week One: Introduction/ Mendel and the Gene Idea

Topic Description

Readings: M

W Mendelian Genetics

F Lab Safety Rules and Regulations

Week Two: Genetics

Topic Description

Readings: M Mendel's Experiments

W Monohybrid and Dihybrid Crosses

F Lab Exercise on Genetic Crosses & Lecture on Inheritance Patterns

Week Three: Mendel a M Mendelian patterns of Inheritance

Topic Description W Genetic Testing and Counseling

F Lecture Exam I (Chapters 12, 13 & 14)nd the Gene Idea

Readings

Week Four: Mendel and The Gene Idea

Topic Description

Readings M Mendelian patterns of Inheritance

W Genetic Testing and Counseling F Lecture Exam I (Chapters 12, 13 & 14)

Week Five: Chromosomal Basis of Inheritance

Topic Description

Readings M Studies in Morgan's Laboratory, Sex Linked Genes

W Alterations of Chromosome Number

F Lab Exercise. Lecture on Human Disorders

Week Six: Molecular Basis of Inheritance

Topic Description

Readings M Genetic Material

W Genetic Material

F Lab Exercise & Lecture on DNA Replication

Week Seven: Molecular Basis of Inheritance

Topic Description

Readings M DNA Replication Continued and Introduction to DNA Repair Mechanisms

W DNA Lecture Continued

F Lab Exercise Lecture on DNA Continued and Structure of Chromosome

Week Eight: Molecular Basis of Inheritance & Gene Expression

Topic Description

Readings M Structure of Chromosome

W Flow of Genetic Information & Introduction to Transcription

F Lecture Exam II (Chapters 15 & 16)

Week Nine: Gene Expression: From Gene to Protein

Topic Description

Readings M Transcription

W Transcription & Translation

F Lab Exercise and Lecture on Transcription and Translation

Week Ten: Gene Expression & Regulation of Gene Expression

Topic Description

Readings M Translations and Introduction to Mutations

W Mutations

F Lab Exercise & Lecture on Operons

Week Eleven: Regulation of Gene Expression

Topic Description

Readings M Operons

W Operons & Regulation of Eukaryotic Gene Expression
F Lab Exercise & Lecture on Roles of Transcription Factors

Week Twelve: Regulation of Gene Expression

Topic Description

Readings M Post-transcriptional Regulation and Noncoding RNAs

W Genetic Changes Leading to Cancer

F Lab Exercise & Exam III (Chapters 17 & 18)

Week Thirteen: Viruses

Topic Description

Readings M Replicative Cycles of Viruses

W Replicative Cycles Continued

F Lab Exercise & Lecture on replicative Cycle of HIV Viruses & Introduction to DNA Tools and Biotechnology

Week Fourteen: Topic Description

Readings M Viroids and Prions

W Valuable Tools Used in Genetic Engineering

F Lab Exercise & lecture on DNA Cloning and Restriction Enzymes

Week Fifteen: DNA Tools and Biotechnology

Topic Description

Readings M Analyzing Gene Expression

W Stem Cells

F Lab Exercise & Lecture on DNA Technology and Medical and Forensic Applications

Week Sixteen: Genomes and Their Evolution

Topic Description

Readings M Human Genome Project and Introduction to Bioinformatics

W Genome Size and Noncoding DNA

F Lab Exercise

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:

- 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.
- 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):

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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.

Academic Calendar - Spring 2018 *subject to change without notice

Jan 11 - Jan 13	Regular Registration Period
Jan 15 , Mon.	Dr. Martin Luther King Jr. Day (University Closed)
Jan 18 , Thurs.	First Class Day. Instruction Begins
Jan 18 - Jan 23 Thurs Tues.	Late Registration and Drop/Add Period
Jan 21 , Sat	Late Registration, Add Courses, Change Major/Certification or any Matriculation Change Ends – Web Registration Access Closed
Feb 02, Fri.	Late Deadline to Apply for Spring 2018 Graduation (Ceremony Participation)
Feb 02 , Fri.	12th Class Day (Census Date) Last Day to Withdraw from Course(s) without Academic Record Late Deadline to Apply for Spring 2018 Graduation Late Deadline for Spring 2018 Graduating Undergraduate Students to Submit Application for Tuition Rebate
Feb 03 – Apr 04 Sat. – Wed.	Withdrawal from Course(s) with Academic Record ("W") Period
Feb 05 – May 01	Application for Degree Conferral only for Spring 2018 (No Ceremony Participation)
Feb 14, Wed.	20th Class Day
Mar 08 - Mar 10	Mid-Semester Examination Period
Mar 12 - Mar 17	Spring Break
Mar 16 , Fri.	Spring Break (University Closed)
Mar 19 , Mon.	Instruction Resumes
Mar 20, Tues.	Mid-Semester Grades Due
Mar 22 , Thurs.	60% of Term
Mar 28, Wed.	Founders Day/ Honors Convocation
Apr 04, Wed.	Withdrawal from Course(s) with Academic Record ("W") Ends
Apr 10 - May 23	Priority Registration Period Fall 2018 semester
Apr 13 , Fri.	Deadline to Apply for Degree Conferral for Summer and Fall 2018
Apr 30 - May 01	Course Review Days [Classes must convene and instructors will prepare students for Final Exams]
May 01 , Tues.	Last Class Day for Spring 2018 Semester Last Day to Withdraw from the University (from All Courses) for the Spring 2018 semester
May 02 - May 08	Final Examination Period Wednesday through Tuesday
May 09 , Tues.	Final Grades Due for Graduating Candidates
May 12 , Sat.	Commencement
May 15, Tues.	Final Grades Due