BIOL 3413 SYNTHETIC BIOLOGY
August 22, 2022 – December 7, 2022

Instructor: Dr. D. Vaden, Ph.D.
Section # and CRN: P01, 18010 and P81, 18011
Office Location: E.E. O’Banion Science Building, Biology Department, Suite 430AB
Office Phone: (936) 261-3172
Email Address: dlvaden@pvamu.edu (eCourses powered by Canvas email preferred). Instructor email responds to students within 48 hours during the work week, Monday through Friday (excluding weekends)
Office Hours: Monday 10:00 – 12:00 PM & Wednesday, 2 - 3 PM or by appointment.
Mode of Instruction: Face to Face (F2F)
Course Location: E.E. O’Banion Science Building
Class Days & Times: Lecture - MW, 8:00AM - 8:50 AM, Rm. A103  Lab - TR, 8:00 – 9:50 AM, Rm. 407
Catalog Description: BIOL 3413 Credit (2-4) credit 4 semester hours. The interdisciplinary study of synthetic biology applied to design and construct new biological parts, devices, and systems. Laboratory fee required.
Prerequisites: BIOL 1510, 1502, 2054, 3307, CHEM 2304
Co-requisites: NA
Required Texts: Literature, research articles, and reviews that cover diverse areas within synthetic biology will be provided to each student.
Other Required Labster Virtual Simulations, Draw It to Know It App, and Pixton App (learning platforms, subscriptions provided).

Student Learning Outcomes:
Program Learning Outcome # Alignment: knowledge of #1) the chemical basis of life, #2) the central concepts of Genetics; #3) Cell Biology; #4) Organismal Biology; and #5) scientific communication
Core Curriculum Outcome Alignment: Critical Thinking, Communication, Empirical and Quantitative Skills, and Teamwork

<table>
<thead>
<tr>
<th>Upon successful completion of this course, students will be able to:</th>
<th>Program Learning Outcome # Alignment</th>
<th>Core Curriculum Outcome Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Understand concepts and methods of Synthetic Biology.</td>
<td>#1-4</td>
<td>Critical Thinking</td>
</tr>
<tr>
<td>2 Demonstrate a greater appreciation for interdisciplinary sciences.</td>
<td>#1-4</td>
<td>Critical Thinking</td>
</tr>
<tr>
<td>3 Increase motivation and involvement in the process of scientific discovery.</td>
<td>#1-4</td>
<td>Critical Thinking, Empirical and Quantitative Skills</td>
</tr>
<tr>
<td>4 Acquire laboratory experience using current research technology</td>
<td>#1-4</td>
<td>Critical Thinking, Empirical and Quantitative Skills</td>
</tr>
<tr>
<td>5 Develop analytical skills using a wide assortment of experimental methods to develop critical thinking skills</td>
<td>#1-4</td>
<td>Critical Thinking, Empirical and Quantitative Skills</td>
</tr>
<tr>
<td>6 Develop students’ competency using mathematical models and genetic circuits to make testable predictions.</td>
<td>#1-4</td>
<td>Empirical and Quantitative Skills</td>
</tr>
<tr>
<td>7 Demonstrate knowledge of scientific communication and ability to work in groups</td>
<td>#5</td>
<td>Teamwork and Communication</td>
</tr>
<tr>
<td>8 Develop awareness of career opportunities in Synthetic Biology.</td>
<td>#5</td>
<td>Critical Thinking</td>
</tr>
</tbody>
</table>
Major Course Requirements

Method of Determining Final Course Grade

COURSE EVALUATION METHODS:
The University's Academic Catalog grading policy is used in this course.

<table>
<thead>
<tr>
<th>Course Grade Requirement</th>
<th>Value</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Lecture Exams, Lab Exams, Scientific communication</td>
<td>50%</td>
<td>50</td>
</tr>
<tr>
<td>2) Class assignments: Lecture Assignments, Discussions, eCourses Quizzes, Draw It to Know It, Pixton</td>
<td>25%</td>
<td>25</td>
</tr>
<tr>
<td>3) Hand on lab assignments, Labster Virtual Laboratory Simulations, and Lab Reports</td>
<td>20%</td>
<td>20</td>
</tr>
<tr>
<td>4) Lecture &amp; Lab Performance/Participation</td>
<td>5%</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>100%</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Grading Criteria and Conversion:
A = 90-100; B = 80-89; C = 70-79; D = 60-69; F = Below 60

This syllabus is subject to change at the discretion of the instructor

Detailed Description of Major Assignments:

Assignment Title or Grade Requirement | Description
---|---
Lecture & Lab Exams | Four exams (midterm, final and two lab exams) will be administered. The average of all lecture and lab exams will constitute thirty percent (50%) of the semester grade. The Department of Biology assessment of student learning and achievement, for accreditation, is measured by student’s performance on the final exam. The performance on the final exam is very important in determining the knowledge obtained during the semester and often reflect the over-all grade for the semester. At least four lecture/lab exams will be conducted during the semester. The dates for each exam will be announced at least one week prior to the administration of the exam. The average of all exams constitutes percent (50%) of the final grade.

Class assignments | Class assignments will consist of eCourses quizzes/ lab exercises / lecture quizzes / Discussion forums, etc. Unannounced quizzes may be given by the instructor to evaluate how well students are learning the most recent synthetic biology concepts taught. The average of all graded class assignments will count for 25% of the total grade.

Students will use “Draw It to Know It”, an online educational platform used to study and review biological concepts. It provides multiple ways for students to learn and demonstrate learning: through watching and reading, drawing and labeling, and taking quizzes. Draw It to Know It includes:
- Tutorials (6-8 Minute Animated, Narrated Tutorials, Bulleted Notes & Final Drawings)
- Active Learning (Web-based Drawing Pad, Drag/Drop Labels, Downloadable Starter Images)
- Quiz Questions (Rapid Review, Clinical Correlations, Real-Life Correlations, and Scientific References)
- See eCourses for the platform’s technical requirements and instructions

Students will use Pixton, a web-based comic creation platform designed for classroom use.

Lab assignments: | Hand on lab assignments, Labster Virtual Laboratory Simulations, and Lab Reports. The average of all graded class assignments will count for 20% of the total grade.
The lab performance component is determined by complying with the student attendance, use of classroom assignments during synchronous class times, submitting assignments on time, participation & interaction with collaborative teams. The average of all graded lab assignments will count for 5% of the total grade.

Course Procedures or Additional Instructor Policies

1. INSTRUCTIONAL TYPE: BIOL 3413 is a synchronous Face to Face course. This course type is NOT an online course (an asynchronous or synchronous course delivered fully online). The class is synchronous meaning the course instruction/activities will be delivered on the days and times specified. The instructional type takes place in the face-to-face (professor and students together in one location). Attendance will be taken during scheduled times.

2. COMMITMENT TO LEARNING: Please note that this course requires effective time management by students in order to remain on schedule. Students should plan to allocate, at a minimum, the time required for the course when offered in an on-campus/faceto-face setting. As a rule of thumb, it is recommended that a student spend 2 hours of study for each 1 hour in class. Therefore, for a 4.0 credit hour course, a minimum of 8 hours of study per week (15-week semester) may be required. The course is comprised of multiple readings and assignments organized to correspond to a standard semester. The course is NOT self-paced; assignments and readings must be completed each week. Each chapter includes the following learning activities: 1) assigned mandatory readings in eCourses 2. Completion of class assignments, eCourses quizzes, and discussion forums are required and 3) Participation assignments are required

3. LATE ASSIGNMENTS: Online assignments are typically available for varying durations (hours to weeks). It is especially important not to wait until the deadlines to complete assignments. Personal technical issues before the deadline are not a valid excuse for not completing assignments. Official excuses must be documented for the assignment period for accommodations to be made. There are no extensions for online lecture and lab assignments without official excuse.

4. MAKE-UP EXAMS: Students are strongly advised to take all exams at the scheduled time. Plan and schedule your activities so that you can be present to take all exams at the scheduled time. Students with non-valid or non-official excuses for missing an exam will earn a grade of zero (0) for the missed exam. Students may request a make-up exam if an official excuse is provided. However, the instructor will schedule the time and place of the make-up exam which will not interrupt the teaching of the class or delay the complete coverage of the course topics. Students who are scheduled for the make-up exam and miss it will not be provided a second opportunity to take an exam for the original exam that was missed.

5. CLASS ATTENDANCE: The University Attendance Policy requires students to be present for each scheduled class, whether face-to-face, online or hybrid. Attendance in class is documented and report to the university. For this hybrid course, student presence during Zoom meeting and course activity will be used to document attendance. Attendance in class is documented and report to the university. It is the responsibility of each faculty member to accurately record and report student attendance during the Students with or without official excuses for missing class will be tested and evaluated the same as students who attend class. However, students attending class will have the advantage of being taught knowledgeable information which they are expected to know. Students are responsible for materials covered during their absences. Classes will start at the prescribed time and end at the prescribed time. Absences are accumulated beginning with the first day of class. The University catalog provides more detailed information.

6. CHEATING: Students caught cheating will receive a grade of F for the course. Students are prohibited from participation in acts of academic dishonesty, including tampering with records or falsifying admissions or other information. Disciplinary action will be taken against any student who alone or with others engages in any act of academic fraud or deceit. The undergraduate catalog provides more detailed information. It is the responsibility of students and faculty members to maintain academic integrity at the University by refusing to participate in or tolerate academic dishonesty.

CLASSROOM CIVILITY: Each student is encouraged to help create an environment during class that promotes learning, dignity, and mutual respect for everyone. Students who speak at inappropriate times, sleep in class, display inattention, take frequent breaks, interrupt the class by coming to class late, engage in loud or distracting behaviors, use cell phone in class, use inappropriate language, are verbally abusive, display defiance or disrespect to others, or behave aggressively toward others could be asked to leave the class and subjected to disciplinary
action under the Code of Student Rights, Responsibilities and Disciplinary Procedures.

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

**TENTATIVE LECTURE SCHEDULE AND COURSE OUTLINE:**

<table>
<thead>
<tr>
<th>LECTURE TOPIC</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Overview of synthetic biology</td>
<td>Synthetic biology articles: history, current applications, and future directions</td>
</tr>
<tr>
<td>II. Molecular Biology</td>
<td>Flow of Biological Information / Central Dogma of Molecular Biology</td>
</tr>
<tr>
<td>III. Gene Regulation</td>
<td>Prokaryotic and eukaryotic gene regulation</td>
</tr>
<tr>
<td>IV. Molecular Biology/Genetics Technology &amp; Techniques</td>
<td>Genetic engineering, PCR, Gel electrophoresis, DNA Sequencing</td>
</tr>
<tr>
<td>V. Molecular Cloning</td>
<td>Molecular cloning techniques</td>
</tr>
<tr>
<td>VI. Modeling</td>
<td>Bioengineering, building a genetic circuit, building a mathematic model for biological systems</td>
</tr>
<tr>
<td>VII. Constructing Vectors</td>
<td>BioBricks: Mining nature of new parts</td>
</tr>
</tbody>
</table>

**TENTATIVE VIRTUAL SIMULATIONS:**

<table>
<thead>
<tr>
<th>LECTURE TOPIC</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Biosafety</td>
<td>Learn how to perform an experiment inside a Biosafety containment level.</td>
</tr>
<tr>
<td>II. Molecular Cloning</td>
<td>Learn about recombinant DNA technology with cell division, transcription and, translation. Includes concepts in restriction enzymes, cloning and, reporter genes</td>
</tr>
<tr>
<td>III. Engineering principles</td>
<td>The essential components of a basic electric circuit</td>
</tr>
<tr>
<td>III. Synthetic Biology</td>
<td>Cutting edge research engineering a biological circuit. Learn all the steps from the initial circuit construction, Gibson assembly, and in vivo testing</td>
</tr>
<tr>
<td>Uracil-based excision cloning (USER): Cloning made simple</td>
<td>Uracil-excision (USER) based cloning to create vectors rapidly and efficiently.</td>
</tr>
<tr>
<td>Multiplex Automated Genomic Engineering (MAGE): Conjuring massive mutations</td>
<td>The MAGE technique helps scientists to perform many genetic mutations at many target sites at a time. Gateway cloning technique and how design your own biological circuit Understand how BioBricks and 3A-Assembly The International Genetically Engineered Machine (iGEM) competition</td>
</tr>
</tbody>
</table>

**TENTATIVE Hand on Labs:**

Introduction to synthetic biology/bio-engineering concepts, laboratory techniques, and data analysis.

<table>
<thead>
<tr>
<th>Laboratory Skills</th>
<th>Scientific Measurement, Sterile Techniques, Culturing Microbes, Ligation &amp; Transformation, Plasmid Purification (Miniprep), Polymerase Chain Reaction, DNA Purification</th>
</tr>
</thead>
<tbody>
<tr>
<td>pClone: Exploring Promoters with Synthetic Biology</td>
<td>Students clone the promoters into the plasmids, pClone Red and pClone Blue, using a common cloning technique, Golden Gate Assembly (GGA). After cloning the promoters, students are tasked with performing a transformation on E. coli cells to produce new ampicillin-resistant colonies expressing their designed plasmids.</td>
</tr>
<tr>
<td>BioBuilder iTune Device</td>
<td>Examines the role of parts, such as promoters and ribosome binding sites, in predicting the output of a genetic device. Students measure β-galactosidase enzymatic activity as the device’s output, to</td>
</tr>
</tbody>
</table>
predict and then evaluate a device’s behavior.

<table>
<thead>
<tr>
<th>BioBuilder What a Colorful World</th>
<th>Examines the role of the cellular chassis in system performance. Students transform different strains of E. coli with DNA that turns the cells several bright colors. Students then observe how different the color intensity can be from strain to strain, despite being encoded by the same DNA sequence.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BioBuilder Eau That Smell</td>
<td>Compares two alternative genetic designs. Both programs should make the cells smell like ripe bananas as the cells grow</td>
</tr>
<tr>
<td>BioBuilder Golden Bread</td>
<td>Explores the science, engineering, and bioethics of a yeast that’s genetically modified to make a vitamin-enriched food. Lab activities include PCR, yeast transformation, codon shuffling and quantitative analysis of data</td>
</tr>
</tbody>
</table>

**Student Support and Success**

**John B. Coleman Library**

The John B. Coleman Library’s mission is to enhance the scholarly pursuit of knowledge, to foster intellectual curiosity, and to promote life-long learning and research through our innovative services, resources, and cultural programs, which support the Prairie View A&M University’s global mission of teaching, service, and research. It maintains library collections and access both on campus, online, and through local agreements to further the educational goals of students and faculty. Website: [https://www.pvamu.edu/library/](https://www.pvamu.edu/library/); Phone: 936-261-1500

**Academic Advising Services**

Academic Advising Services offers students a variety of services that contributes to student success and leads towards graduation. We assist students with understanding university policies and procedures that affect academic progress. We support the early alert program to help students get connected to success early in the semester. We help refer students to the appropriate academic support services when they are unsure of the best resource for their needs. Faculty advisors support some students in their respective colleges. Your faculty advisor can be identified in PantherTracks. Advisors with Academic Advising Services are available to all students. We are located across campus. Find your advisor’s location by academic major at [www.pvamu.edu/advising](http://www.pvamu.edu/advising). Phone: 936-261-5911

**The University Tutoring Center**

The University Tutoring Center (UTC) offers free tutoring and academic support to all registered PVAMU students. The mission of the UTC is to help provide a solid academic foundation that enables students to become confident, capable, independent learners. Competent and caring staff and peer tutors guide students in identifying, acquiring, and enhancing the knowledge, skills, and attitudes needed to reach their desired goals. Tutoring and academic support are offered face-to-face in the UTC, in virtual face-to-face sessions ([https://www.pvamu.edu/student-success/sass/university-tutoring-center/](https://www.pvamu.edu/student-success/sass/university-tutoring-center/)), and through online sessions ([https://www.pvamu.edu/pvplace/](https://www.pvamu.edu/pvplace/)). Other support services available for students include Supplemental Instruction, Study Break, Academic Success Workshops, and Algebra Study Jam. Location: J. B. Coleman Library, Rm. 307; Phone: 936-261-1561; Email: pvtutoring@pvamu.edu; Website: [https://www.pvamu.edu/student-success/sass/university-tutoring-center/](https://www.pvamu.edu/student-success/sass/university-tutoring-center/)

**Writing Center**

The Writing Center provides well-trained peer tutors to assist students with writing assignments at any stage of the writing process. Tutors help students with various writing tasks from understanding assignments, brainstorming, drafting, revising, editing, researching, and integrating sources. Students have free access to Grammarly online writing assistance. Grammarly is an automated proofreading and plagiarism detection tool. Students must register for Grammarly by using their student email address. In addition, students have access to face-to-face and virtual tutoring services either asynchronously via email or synchronously via Zoom. Location: J. B. Coleman Library, Rm. 209; Phone: 936-261-3724; Website: [https://www.pvamu.edu/student-success/writing-center/](https://www.pvamu.edu/student-success/writing-center/); Grammarly Registration: [https://www.grammarly.com/enterprise/signup](https://www.grammarly.com/enterprise/signup)

**Academic Early Alert**

Academic Early Alert is a proactive system of communication and collaboration between faculty, academic advisors, and PVAMU students that is designed to support student success by promptly identifying issues and allowing for intervention. Academic Early Alerts help students by providing a central location to schedule advising appointments, view advisor contact information, and request assistance. Students who recognize that they have a problem that is negatively affecting their academic performance or ability to continue school may self-refer an Academic Early Alert. To do so, students will log in to PV Place and click on Academic Early Alert on the left sidebar. Phone: 936-261-5902; Website: [https://www.pvamu.edu/student-success/early-alert/](https://www.pvamu.edu/student-success/early-alert/)

**Student Counseling Services**
The Student Counseling Services unit offers a range of services and programs to assist students in maximizing their potential for success: short-term individual, couples, and group counseling, as well as crisis intervention, outreach, consultation, and referral services. The staff is licensed by the State of Texas and assists students who are dealing with academic skills concerns, situational crises, adjustment problems, and emotional difficulties. Information shared with the staff is treated confidentially and in accordance with Texas State Law.

Location: Hobart Taylor, 2nd floor; Phone: 936-261-3564; Website: https://www.pvamu.edu/healthservices/student-counseling-services/

Office of Testing Services
Testing Services serves to create opportunities by offering a suite of exams that aid in the students' academic and professional success. Currently, we administer entrance (HESI A2), college readiness (TSI assessment), Prior Learning (CLEP, DSST), and proctored exams. Location: Wilhelmina Delco, 3rd Floor, Rm. 305; Phone: 936-261-3627; Email: aetesting@pvamu.edu; Website: www.pvamu.edu/testing

Office of Diagnostic Testing and Disability Services
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, contact the Office of Disability Services. As a federally-mandated educational support unit, the Office of Disability Services serves as the repository for confidential disability files for faculty, staff, and students. For persons with a disability, the Office develops individualized ADA letters of request for accommodations. Other services include learning style inventories, awareness workshops, accessibility pathways, webinars, computer laboratory with adapted hard and software, adapted furniture, proctoring non-standardized test administrations, ASL interpreters, ALDs, digital recorders, Livescribe, and a comprehensive referral network across campus and the broader community. Location: Hobart Taylor, Rm. 1D128; Phone: 936-261-3583; Website: https://www.pvamu.edu/disabilityservices/

Center for Instructional Innovation and Technology Services (CIITS)
Distance Learning, also referred to as Distance Education, is the employment of alternative instructional delivery methods to extend programs and services to persons unable to attend college in the traditional manner. The Center for Instructional Innovation and Technology Services (CIITS) supports student learning through online, hybrid, web-assist, and 2-way video course delivery. For more details and contact information, visit: https://www.pvamu.edu/dlearning/distance-learning-2-2/students-2/; Phone: 936-261-3283

Veteran Affairs
Veterans Services works with student veterans, current military and military dependents to support their transition to the college environment and continued persistence to graduation. The Office coordinates and certifies benefits for both the G.I. Bill and the Texas Hazlewood Act. Location: Evans Hall, Rm. 102; Phone: 936-261-3563; Website: https://www.pvamu.edu/sa/departments/veteranaffairs/

Office for Student Engagement
The Office for Student Engagement delivers comprehensive programs and services designed to meet the co-curricular needs of students. The Office implements inclusive and accessible programs and services that enhance student development through exposure to and participation in diverse and relevant social, cultural, intellectual, recreational, community service, leadership development, and campus governance. Location: Memorial Student Center, Rm. 221; Phone: 936-261-1340; Website: https://www.pvamu.edu/studentengagement/

Career Services
Career Services supports students through professional development, career readiness, and placement and employment assistance. The Office provides one-on-one career coaching, interview preparation, resume and letter writing, and career exploration workshops and seminars. Services are provided for students at the Northwest Houston Center and College of Nursing in the Medical Center twice a month or on a requested basis. Distance Learning students are encouraged to visit the Career Services website for information regarding services provided. Location: Anderson Hall, 2nd floor; Phone: 936-261-3570; Website: https://www.pvamu.edu/careerservices/

University Rules and Procedures

Academic Misconduct
Academic dishonesty is defined as any form of cheating or dishonesty that has the effect or intent of interfering with
any academic exercise or fair evaluation of a student's performance. The college faculty can provide additional information, particularly related to a specific course, laboratory, or assignment.

You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with the University Administrative Guidelines on Academic Integrity, which can be found on the Academic Integrity webpage. Students who engage in academic misconduct are subject to university disciplinary procedures. As listed in the University Administrative Guidelines on Academic Integrity, the University Online Catalog, and the Student Code of Conduct, the following are examples of prohibited conduct. This list is not designed to be all-inclusive or exhaustive. In addition to academic sanctions, any student found to have committed academic misconduct that is also a violation of criminal law may also be subject to disciplinary review and action by the Office of Student Conduct (as outlined in the Student Code of Conduct).

**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 learned, giving or receiving aid unauthorized by the instructor on assignments or examinations. Examples: unauthorized use of notes for a test; using a "cheat sheet" on a quiz or exam; any alteration made on a graded test or exam which is then resubmitted to the teacher;

2. **Plagiarism**: Careless or deliberate use of the work or the ideas of another; representation of another's work, words, ideas, or data as your own without permission or appropriate acknowledgment. Examples: copying another's paper or answers, failure to identify information or essays from the internet and submitting or representing it as your own; submitting an assignment which has been partially or wholly done by another and claiming it as yours; not properly acknowledging a source which has been summarized or paraphrased in your work; failure to acknowledge the use of another's words with quotation marks;

3. **Collusion**: When more than one student or person contributes to a piece of work that is submitted as the work of an individual;

4. **Conspiracy**: Agreeing with one or more persons to commit an act of academic/scholastic dishonesty; and

5. **Multiple Submission**: Submission of work from one course to satisfy a requirement in another course without explicit permission. Example: using a paper prepared and graded for credit in one course to fulfill a requirement and receive credit in a different course.

**Nonacademic Misconduct**

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. The Office of Student Conduct will adjudicate such incidents under nonacademic procedures.

**Sexual Misconduct**

Sexual harassment of students and employees at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating the university's sexual harassment policy will be subject to disciplinary action. In accordance with the Texas A&M University System guidelines, your instructor is obligated to report to the Office of Title IX Compliance (titleixteam@pvamu.edu) any instance of sexual misconduct involving a student, which includes sexual assault, stalking, dating violence, domestic violence, and sexual harassment, about which the instructor becomes aware during this course through writing, discussion, or personal disclosure. The faculty and staff of PVAMU actively strive to provide a learning, working, and living environment that promotes respect that is free from sexual misconduct, discrimination, and all forms of violence. If students, faculty, or staff would like assistance or have questions, they may contact the Title IX Coordinator at 936-261-2144 or titleixteam@pvamu.edu. More information can be found at www.pvamu.edu/titleix, including confidential resources available on campus.

**Pregnancy, Pregnancy-related, and Parenting Accommodations**

Title IX of the Education Amendments of 1972 prohibits sex discrimination, which includes discrimination based on pregnancy, marital status, or parental status. Students seeking accommodations related to pregnancy, pregnancy-
related conditions, or parenting (reasonably immediate postpartum period) are encouraged to contact Student Disability Services or the Dean of Students’ Office for additional information and to request accommodations.

Non-Discrimination Statement
Prairie View A&M University does not discriminate on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, or gender identity in its programs and activities. The University is committed to supporting students and complying with The Texas A&M University System non-discrimination policy. It seeks to establish an environment that is free of bias, discrimination, and harassment. If you experience an incident of discrimination or harassment, we encourage you to report it. If you would like to speak with someone who may be able to afford you privacy or confidentiality, there are individuals who can meet with you. The Director of Equal Opportunity & Diversity has been designated to handle inquiries regarding the non-discrimination policies and can be reached at Harrington Science Building, Suite 109 or by phone at 936-261-1744 or 1792.

Class Attendance Policy (See the University Online Catalog for Full Attendance Policy)
Prairie View A&M University requires regular class attendance. Attending all classes supports the full academic development of each learner, whether classes are taught with the instructor physically present or via distance learning technologies such as interactive video and/or the internet. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in the assignment of a grade of "F." Absences are accumulated beginning with the first day of class during regular semesters and summer terms. Each faculty member will include the University’s attendance policy in each course syllabus.

Student Academic Appeals Process
Authority and responsibility for assigning grades to students rest 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 University Online Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

Technical Considerations
Minimum Recommended Hardware and Software:
- Intel PC or Laptop with Windows 10 or later version; Mac with OS High Sierra*
- 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, or Firefox

Note: Be sure to enable Java & pop-ups in the Web browser preferences

* Smartphones, Google Chrome books, and Android tablets may not be supported. iPads are the only tablets supported.

Labster simulations requirements
Labster is an externally provided resources (e.g., publisher-supplied online materials and activities and third-party, vendor-provided software, materials, and activities)

If you have any problems with Labster please Contact Labster Support ASAP with the link below or go to eCourses powered by Canvas, Modules, “Contact Labster Support”.

https://help.labster.com/en/articles/1391733-contact-labster-support (Links to an external site.)
On the Labster Support page, there are compiled help articles, FAQ's, how to's and useful information in the Labster Help Center. Students can access it 24/7 help.

Contact for Labster Support and FAQ
Labster simulations can only be used on a laptop or desktop-based computers, which meet the following requirements:

- **Processor:** Dual-core 2 GHz or higher
- **Memory:** 4 GB or more
- **Graphic card:** Intel HD 3000 / GeForce 6800 GT / Radeon X700 or higher
- **OS:** Latest version of Windows (64-bit) or Mac OS or ChromeOS
- **Supported browsers:** Latest version of Firefox and Chrome
- A stable internet Connection

iPad/Phone/Tablets not yet supported

*Important: Labster simulations do not yet run on mobile devices such as smartphones and tablets. We are working on adding this in the future.*

Chromebook Support
Labster's virtual lab simulations are accessible on Chromebooks that meet the minimum specifications above. Since there are many different Chromebooks, it can be difficult to determine if your specific Chromebook meets those specifications.

Labster's virtual lab simulations are accessible on Chromebooks that meet the minimum specifications above. This applies to most Chromebooks, but older or very low-end Chromebooks with low memory especially may not work.

**How do I determine if my Chromebook is supported?**
Since there are many different Chromebooks, it can be difficult to determine if your specific Chromebook meets those specifications.

To help you determine this, we recommend you

1. Check the Chromebook brand and device model (e.g. Acer Chromebook 15)
2. Search on ChromeBookSpecs.com for this model
3. Look especially for the amount of memory (minimum 4GB SDRAM) and processor speed (minimum dual-core 2 GHz CPU).

   *Note example laptop below: It has enough memory but too slow processor. Labster might still run on this laptop, but loading and performance will be slow. Therefore this laptop is not recommended, and not supported by Labster.*

**Participants should have a basic proficiency of the following computer skills:**

- Sending and receiving email
- A working knowledge of the Internet
- Microsoft Word (or a program convertible to Word)
- Acrobat PDF Reader
- Windows or Mac OS
- Video conferencing software

**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 discussion boards. Foul or abusive language will not be tolerated. Do not use ALL CAPS for communicating to others AS IT CAN BE INTERPRETED AS YELLING. Avoid slang terms such as "wassup?" and texting abbreviations such as "u" instead of "you." Limit and possibly avoid the use of emoticons. Be cautious when using humor or sarcasm as tone is sometimes lost in an email or discussion post, and the message might be taken seriously or sound offensive.

**Video Conferencing Etiquette**
When using Zoom, WebEx, or other video conferencing tools, confirm the visible area is tidy, clear of background
clutter, inappropriate or offensive posters, and other distractions. Ensure you dress appropriately and avoid using high traffic or noisy areas. Stay muted when you are not speaking and avoid eating/drinking during the session. Before the class session begins, test audio, video, and lighting to alleviate technology issues.

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 Center for Instructional Innovation and Technology Services at 936-261-3283 or email ciits@pvamu.edu.

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 occur in a seminar fashion. The use of the discussion board will accomplish this. The instructor will determine the exact use of discussion boards.

It is strongly suggested that students type their discussion postings in a word processing application such as Word 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, copy and paste to the discussion board.

COVID-19 Campus Safety Measures
To promote public safety and protect students, faculty, and staff during the coronavirus pandemic, PVAMU has adopted policies and practices to limit virus transmission.

- **Self-monitoring** - Students should follow CDC recommendations for self-monitoring. Students who have a fever or exhibit symptoms of COVID-19 should participate in class remotely and should not participate in face-to-face instruction.

- **Face Coverings** - Face coverings (cloth face covering, surgical mask, etc.) are recommended in classrooms, teaching laboratories, common spaces such as lobbies and hallways, public study spaces, libraries, academic resource, and support offices, and outdoor spaces where 6 feet of physical distancing is challenging to maintain reliably. Please note that face coverings are highly recommended indoors and outdoors when physical distancing is not possible. At present, not everyone has been vaccinated; therefore, asymptomatic, unvaccinated individuals pose a risk, and face coverings help reduce that risk. Face masks will be made available to all departments for use and distribution when needed in the classroom and other spaces.

- **Physical Distancing** - Physical distancing should be maintained between students, instructors, and others in course and course-related activities where possible.

- **Personal Illness and Quarantine** - Students required to quarantine are to participate in courses and course-related activities remotely and must not attend face-to-face course activities. Students should notify their instructors of the quarantine requirement. Students under quarantine are expected to participate in courses and complete graded work unless they have symptoms that are too severe to participate in course activities. Students experiencing personal injury or illness that is too severe for the student to attend class qualify for an excused absence. To receive an excused absence, students must provide appropriate documentation to the Office for Student Conduct, studentcondui@pvamu.edu.

- **COVID-19 Testing and Vaccinations**
  Testing is required of students moving into on-campus residential housing, but vaccination is the most effective way to mitigate the impact of COVID-19. Vaccinations are, therefore, strongly encouraged. Contact Health Services at 936-261-1410 to schedule an appointment for vaccinations. Testing will be
offered at the main campus through the Curative kiosk through the fall semester.

- **Course Attendance**
  There will be no relaxed attendance policy for the Fall 2022 semester. Students must have an official excused absence if not present for classes or coursework. **Following self-reporting, students will receive an excused absence from the Dean of Students. Communication with the student’s instructor for remote support will take place by the Office of the Assistant Vice President for Academic Engagement and Success (Mr. John Gardner, jpgardner@pvamu.edu).**

Students who are sick or who are self-quarantining due to COVID-19 related illnesses or exposure, must not attend in-person class sessions. Students who are feeling sick should follow PVAMU’s COVID guidelines posted at [https://www.pvamu.edu/coronavirus/](https://www.pvamu.edu/coronavirus/).

To provide a safe, equitable, and inclusive experience for students who are sick or who are self-quarantining, the following online requirements are necessary for successful completion of the course: 1) acquire reliable internet access, 2) meet all computer requirements, require course participation at scheduled times via Zoom (when available).

If possible, students who miss class due to illness should:
- Notify instructor by email in advance of missing class.
- Attend and/or review materials to stay abreast of all class materials and activities.
- Contact the instructor regularly regarding assignments, etc. via email or the Synthetic Biology eCourses “Course Attendance Excuses”. Students must acknowledge access to the class materials for the day/week.
- Submit assignments electronically if permissible
- Reschedule all face-to-face exams and/or assignments with instructor

### Academic Calendar Fall 2022 – Full Term

The Prairie View A&M University Academic Calendar subject to change as state, system, and local guidelines evolve in relation to COVID. Any updates will be posted to [https://www.pvamu.edu/coronavirus/](https://www.pvamu.edu/coronavirus/).

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 22</td>
<td>Financial Aid Satisfactory Academic Progress (SAP) Appeal Deadline</td>
</tr>
<tr>
<td>Aug 22</td>
<td>First Class Day</td>
</tr>
<tr>
<td>Aug 22</td>
<td>Tuition &amp; Fees Payment Due Date @ 5:00 p.m.</td>
</tr>
<tr>
<td>Aug 22 - Aug 29</td>
<td>Late Registration/Late Registration Fee Begins ($50.00)</td>
</tr>
<tr>
<td>Aug 22 - Aug 31</td>
<td>Attendance Reporting Period (NS/SH) Students who do not attend class during this period will have their courses removed and financial aid reduced or cancelled</td>
</tr>
<tr>
<td>Sep 02</td>
<td>Financial Aid Refunds Begin</td>
</tr>
<tr>
<td>Sep 05</td>
<td>Labor Day Holiday (University Closed) *Subject to approval by The Texas A&amp;M University System Board of Regents and may change.</td>
</tr>
<tr>
<td>Sep 07</td>
<td>12th Class Day (Census Date)</td>
</tr>
<tr>
<td>Sep 13</td>
<td>Drop for Non-Payment of Tuition and Fees @ 5:00 p.m.</td>
</tr>
<tr>
<td>Sep 19</td>
<td>Final Day to Drop/Withdraw from Course(s) without Academic Record (A Financial Record will still exist)</td>
</tr>
<tr>
<td>Sep 19</td>
<td>20th Class Day</td>
</tr>
<tr>
<td>Sep 20</td>
<td>Withdrawal from Courses with Academic Record (&quot;W&quot;) Begins</td>
</tr>
<tr>
<td>Oct 13 - Oct 15</td>
<td>Mid-Semester Examination Period</td>
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<tr>
<td>Date</td>
<td>Event</td>
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<tr>
<td>Oct 17</td>
<td>Student and Faculty Non-Class Day</td>
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<tr>
<td>Oct 19</td>
<td>Mid-Semester Grades Due</td>
</tr>
<tr>
<td>Oct 27</td>
<td>Final Date to Apply for Fall 2022 Graduation (ceremony participation)</td>
</tr>
<tr>
<td>Oct 28</td>
<td>Application for Graduation-Degree Conferral only for Fall 2022 Graduation Begins (no ceremony participation or name listed in the program)</td>
</tr>
<tr>
<td>Nov 07</td>
<td>Priority Registration for continuing students for Spring 2023 semester including December/January Mini-Mester (Special Populations)</td>
</tr>
<tr>
<td>Nov 08</td>
<td>Priority Registration for continuing students for Spring 2023 semester including December/January Mini-Mester (Doctoral, Masters, Post-Baccalaureate, Seniors)</td>
</tr>
<tr>
<td>Nov 09</td>
<td>Priority Registration for continuing students for Spring 2023 semester including December/January Mini-Mester (Juniors)</td>
</tr>
<tr>
<td>Nov 10</td>
<td>Priority Registration for continuing students for Spring 2023 semester including December/January Mini-Mester (Sophomores)</td>
</tr>
<tr>
<td>Nov 11</td>
<td>Priority Registration for continuing students for Spring 2023 semester including December/January Mini-Mester (Freshmen)</td>
</tr>
<tr>
<td>Nov 12</td>
<td>Registration for all students begins for the Spring 2023 semester including December/January Mini-Mester</td>
</tr>
<tr>
<td>Nov 24 - Nov 26</td>
<td>Thanksgiving Holiday (University Closed)</td>
</tr>
<tr>
<td>Nov 29</td>
<td>Final Day to Withdraw from a Course or the University (&quot;W&quot;) for the Fall 2022 16-week session</td>
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<tr>
<td>Nov 29</td>
<td>Last Class Day</td>
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<tr>
<td>Nov 30</td>
<td>Study Day (No Classes in Session)</td>
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<tr>
<td>Dec 01 - Dec 07</td>
<td>Final Exams</td>
</tr>
<tr>
<td>Dec 02</td>
<td>Final Day for Graduating Undergraduates to Submit Application for Tuition Rebate for Fall 2022</td>
</tr>
<tr>
<td>Dec 02</td>
<td>Final Day to Apply for Degree Conferral only for Fall 2022 Graduation (No ceremony participation or name listed in the program)</td>
</tr>
<tr>
<td>Dec 08</td>
<td>Final Grades Due for Graduation Candidates (12:00 p.m.)</td>
</tr>
<tr>
<td>Dec 10</td>
<td>Commencement</td>
</tr>
<tr>
<td>Dec 13</td>
<td>Final Grades due for all other students (11:59 p.m.)</td>
</tr>
<tr>
<td>Dec 23 - Jan 01, 2023</td>
<td>Winter Break (University Closed)</td>
</tr>
</tbody>
</table>

**FINAL EXAM SCHEDULE Fall 2021 SEMESTER EXAM WEEK**

*TBA*

The final exam period is Dec. 1 – Dec. 7 (Thursday through Wednesday). *Students should be physically available to take the final exam according to the University’s final*