PRAIRIE VIEW A&M UNIVERSITY

SYLLABUS

ELEG 6375 P01 ADVANCED POWER SYSTEMS Spring 2024

Course Information Description

Instructor: Dr. Samir Abood

Section # and CRN: ELEG 6375 P01 CRN 25372

Office Location: New Electrical Engineering Building (NENGR BLDG), Room #351

Office Phone:

Email Address: siabood@pvamu.edu

Office Hours: T:1:00 pm-3:00 pm, W: 1:00 pm-3:00 pm, F: 1:00 pm-3:00 pm or by appointment

Mode of Instruction: In-Person face-to-face

Course Location: New Electrical Engineering Building (NENGR BLDG), Room #117

Class Days & Times: Tuesday 05:00 pm-7:50 am

Catalog Description: ELEG 6375 Advanced Power Systems: 3 semester hours. Economic Dispatch.

Solving sets of equations that involve large sparse matrices. Sparse matrix storage, ordering schemes, application to power flow analysis, short circuit

calculation, power system planning, and operation.

Prerequisites: Graduate Standing

Co-requisites: None

Required Text(s): Advanced Power System Analysis and Dynamics, L P Singh, 6th Edition
-Samir Abood, "Fundamentals of Electrical Power Systems: A Primer with

MATLAB," 2021, Energy, Energy Science, Engineering and Technology, Engineering & Technology, Imprints, Nova, Science and Technology,

Technology and Engineering.

-Samir Abood, and Muna Fayyadh," Advanced Power Systems and Security: Computer-Aided Design," 2021, Energy, Energy Science, Engineering and Technology, Imprints, Nova, Science and Technology,

Technology and Engineering.

-John Fuller, Pamela Obiomon, Samir I. Abood, Power System Operation, Utilization, and Control, 1st Edition, Publisher: CRC Press, Taylor & Francis

Group,2022.

-Power System Analysis, J.G. Granger, W.D. Stevenson Jr.

Course Learning Objectives:

	Upon successful completion of this course, students will be able to:	Student Learning Outcome # Alignment
1	Design and understand the power systems	Knowledge of the field
2	Be able to understand the sparse matrix	Knowledge of the field
3	Be able to understand power flow	Knowledge of the field

4	Understand the power system faults	Knowledge of the field
5	Find the applications of power electronics in day-to-day life.	Knowledge of the field
6	Understand optimal power flow and state estimations	Knowledge of the field
7	Understand the economics of power system dispatch	Knowledge of the field

Major Course Requirements

Method of Determining Final Course Grade

	Course Grade Requirement	Value	Total
1)	Homework Problems	100	20%
2)	Term Project	100	10%
3)	Midterm Exam	100	20%
4)	Exams 1 and 2	100	20%
5)	Final Exam	100	30%
Total:		500	100%

Grading Criteria and Conversion:

A = 90%-100%

B = 80% - 89%

C = 70% - 79%

D = 60%-69%

F = 0%-59%

If a student has stopped attending the course (i.e., "stopped out") at any point after the first day of class but did not officially withdraw from the course and has missed assignments and exams and performed below the grade level of a D, a grade of FN (failed-non attendance) will be assigned for the final course grade to ensure compliance with the federal Title IV financial aid regulations. In contrast, if the student has completed all assignments and exams, but performed below the grade level of a D, a grade of F will be assigned for the final course grade.

ASSIGNMENTS:

Problems on the topics discussed in class will be assigned. Assignments should be completed and handed in on time. Late homework will not be accepted. All homework should be handed in by the end of the class period of the day they are due.

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 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, but for general information, you can visit Taskstream via the link in eCourses.

Semester Calendar

Week One: Introduction to the course.

(1/16/2024) Syllabus.

Topic Introduction and Advanced Power System

Topic Description

Concept of power systems. Elements of power systems.

Per unit system.

Assignment (s): The assignment will be announced

Week Two: Solving sets of equations related to power system

(1/23/2024)

Topic Description

Principle of formulation of power equations.

Calculation of performance parameters.

Formation of Ybus. Formation of Zbus.

Assignment (s): The assignment will be announced

Week Three: Application to power flow

(1/30/2024)

Topic Description

Gauss Seidel iterative method Power flow using GS method.

Assignment (s): The assignment will be announced

Week Four: Application to power flow (cont.)

(2/6/2024)

Topic Description

Newton Raphson iterative method.

Decoupled load flow. Fast Decoupled load flow.

Assignment (s): The assignment will be announced

Week Five: Short circuit calculation

(2/13/2024)

Topic Description

Effects of Faults.

Performance Requirements of Protection System.

Basic Protection Scheme Components.

Simplified Models of Synchronous Machines for Transient Analysis

Transient Phenomena.

Three–Phase Short Circuit – Unloaded Synchronous Machine.

Effect of Load Current

Assignment (s): The assignment will be announced

Week Six: Short circuit calculation (cont.)

(2/20/2024)

Topic Description

Symmetrical Components

Effect of Symmetrical Components on Impedance

Sequence Network of Unloaded Generator

Assignment (s): The assignment will be announced

Week Seven: Sparse matrices storage ordering

(2/27/2024)

Topic Description

Full-matrix storage mode or a packed storage mode.

Compressed Row Storage (CRS) Compressed Column Storage (CCS) Block Compressed Row Storage (BCRS) Compressed Diagonal Storage (CDS) Jagged Diagonal Storage (JDS)

Skyline Storage (SKS)

Assignment (s): The assignment will be announced

Week Eight: Midterm Exam

(3/5/2024)

Week Nine: Spring Break (Student Break)

(3/12/2024)

Topic Description

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Assignment (s):

Week Ten: Economic analysis

(3/19/2024)

Topic Description

Understanding Cost buildup of Power Plants and the Economics of Operations.

Economic dispatch methods.

Assignment (s): The assignment will be announced

Week Eleven: Economic analysis (Cont.)

(3/26/2024)

Topic Description

Unit Commitment UC problem formulation.

Unit commitment problem methods.

Assignment (s): The assignment will be announced

Week Twelve:

(4/2/2024) State estimation

Topic Description

Principle of State estimation.

A mathematical technique was used.

An intrinsic element of an energy management system (EMS).

supervisory control and data acquisition (SCADA) system with EMS.

Assignment (s): The assignment will be announced

Week Thirteen:

(4/9/2024) Optimal power flow

Topic Description

Load forecasting.

Load forecasting solution methods.

Prediction of load and energy requirements.

Forecasting modeling.

Assignment (s): The assignment will be announced

Week Fourteen:

(4/16/2024) Cybersecurity in Power Systems (cont.)

Topic Description

Design the cybersecurity system in the power system. SCADA Design for the cybersecurity power system.

Assignment (s): The assignment will be announced

Week Fifteen:

(4/23/2024) Project Presentations and review

Week sixteen: Final Exam

(4/30/2024)

Student Support and Success

John B. Coleman Library

The John B. Coleman Library's mission is to enhance the scholarly pursuit of knowledge, foster intellectual curiosity, and 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. Library Website Phone: 936-261-1500

Academic Advising Services

Academic Advising Services offers students various services that contribute to student success and lead toward graduation. We assist students with understanding university policies and procedures that affect academic progress. We support the early alert program to help students connect 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 within Academic Advising Services are available to all students. We are located across campus. Find your advisor's location by academic major on the <u>advising website</u>. 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 goals. Tutoring and academic support are offered face-to-face in the UTC and virtually in online sessions. Other support services available for students include Supplemental Instruction, Study Breaks, Academic Success Workshops, and Algebra Study Jam. Location: J. B. Coleman Library, Rm. 307; Phone: 936-261-1561; Email: pvtutoring@pvamu.edu; University Tutoring Website

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 writing tasks, from understanding assignments to 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 can access face-to-face and virtual tutoring services via email or Zoom. Location: J. B. Coleman Library, Rm. 209; Phone: 936-261-3724; Writing Center Website, Grammarly Registration

Panther Navigate

Panther Navigate is a proactive system of communication and collaboration between faculty, academic advisors, and students that is designed to support student success by promptly identifying issues and allowing for intervention. Panther Navigate helps students by providing a central location to schedule advising appointments, view campus resources, and request assistance. Students who recognize a problem that negatively affects their academic performance or ability to continue school may self-refer to an academic early alert. To do so, students will log in to Canvas and click on Student Alerts on the left sidebar within a course. Students also have the option to download the Navigate Student app. Phone: 936-261-5902; Panther Navigate Website

Student Counseling Services

The Student Counseling Services 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 State of Texas licenses the staff and assists students with academic skills concerns, situational crises, adjustment problems, and emotional difficulties. Information shared with the staff is treated confidentially and by Texas State Law. Location: Hobart Taylor, 2nd floor; Phone: 936-261-3564; Health & Counseling Center Website

Office of Testing Services

The Office of Testing Services facilitates and protects the administration of educational and professional exams to aid students, faculty, staff, and the community in their academic and career goals. We provide proctoring services for individuals who need to take exams for distance or correspondence courses for another institution, exams for independent study courses, or makeup exams. For a proctored exam to be administered by our office, the instructor of the course must first submit the online PVAMU Testing Services – Test Proctoring Form (this form can only be completed by the instructor) to the Office of Testing Services 72 hours before the first exam being administered. Once the Test Proctoring Form has been submitted, the instructor will inform their testers so they can register for an appointment with our office on one of the selected proctored exam test dates within the testing window for the exam and pay the applicable fees. To access the OTS – Test Proctoring Form, to schedule a proctored exam appointment, or to find more information about our proctoring services, please visit the OTS – Proctoring Service website. Location: Wilhelmina Delco, 3rd Floor, Rm. 305; Phone: 936-261-3627; Email: aetesting@pvamu.edu; Testing Website

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. This legislation requires that all students with disabilities be guaranteed a learning environment that reasonably accommodates their disabilities. If you believe you have a disability requiring accommodation, contact the Office of Disability Services. As a federally mandated educational support unit, the Office of Disability Services is 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, a 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; Disability Services Website

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 classes traditionally. CIITS supports student learning through online, hybrid, web-assist, and 2-way video course delivery. For more details and contact information, visit CIITS Student Website. Phone: 936-261-3283 or email: ciits@pvamu.edu.

Veteran Affairs

Veteran 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 the G.I. Bill and the Texas Hazlewood Act. Location: Evans Hall, Rm. 102; Phone: 936-261-3563; Veteran Affairs Website

Office for Student Engagement

The Office for Student Engagement delivers comprehensive programs and services designed to meet the cocurricular 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; <u>Student Engagement Website</u>

Center for Careers & Professional Development

This center supports students through professional development, career readiness, and placement and employment assistance. The center 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 center's website for information regarding the services provided. Location: Anderson Hall, 2nd floor; Phone: 936-261-3570; Center for Careers & Professional Development Website

University Rules and Procedures

Academic Misconduct

Academic dishonesty is 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 about a specific course, laboratory, or assignment.

You are expected to practice academic honesty in every aspect of this and all other courses. Ensure you are familiar with the *University Administrative Guidelines on Academic Integrity* on the <u>Academic Integrity webpage</u>. 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 violates criminal law may 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. <u>Cheating</u>: 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. <u>Plagiarism</u>: 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 another has partially or wholly done 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. <u>Collusion</u>: 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. <u>Multiple Submission</u>: 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.

PVAMU's General Statement on the Use of Generative Artificial Intelligence Tools in the Classroom

Generative Artificial Intelligence (GAI), specifically foundational models that can create writing, computer code, and/or images using minimal human prompting, are increasingly becoming pervasive. Even though ChatGPT is one of the most well-known GAIs currently available, this statement includes all past, current, and future generations of GAI software. Prairie View A&M University expects that all work produced for a grade in any course, face-to-face or virtual, will be the sole product of a student's endeavors to meet those academic goals. However, should an instructor permit their students to use artificial intelligence as a resource or tool, students must not substitute the substance of their original work with the results of using such GAI tools. This violates the University's Administrative Guidelines on Academic Integrity and underlying academic values.

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 ability 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 university community member violating the University's sexual harassment policy will be subject to disciplinary action. By 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 free from sexual misconduct, discrimination, and violence. If students, faculty, or staff would like assistance or have questions, they may contact the Title IX Coordinator, Dr. Zakiya Brown, at 936-261-2144 or titleixteam@pvamu.edu. More information can be found on the Title XI Website, including confidential resources available on campus.

Protections and Accommodations for Pregnant and Parenting Students

The US Department of Education's Office for Civil Rights (OCR) enforces Title IX of the Education Amendments of 1972, among other statutes. Title IX protects people from discrimination based on sex, sexual orientation, and gender identity in education programs or activities that receive federal financial assistance. This protection includes those who may be pregnant and parenting. Title IX states: "No person in the United States shall, based on sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Students seeking accommodations related to pregnancy or parenting should contact the Office of Title IX for information, resources, and support at titleixteam@pvamu.edu. Additional information and/or support may be provided by the Office of Disability Services or the Office of the Dean of Students.

Non-Discrimination Statement

Prairie View A&M University does not discriminate based on 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 free of bias, discrimination, and harassment. If you experience 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, some individuals 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.

Makeup Work for Legitimate Absences

Prairie View A&M University recognizes that there are a variety of legitimate circumstances in which students will miss coursework and that accommodations for makeup work will be made. If a student's absence is **excused**, the instructor must either provide the student an opportunity to make up any quiz, exam, or other work contributing to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor. Students are encouraged to work with instructors to complete makeup work before known scheduled absences (University-sponsored events, administrative proceedings, etc.). Students are responsible for planning their schedules to avoid excessive conflicts with course requirements.

Absence Verification Process

All non-athletic absences (e.g., Medical, Death/Funeral, Court/Legal-related, etc.) for which a student seeks a valid excuse must be submitted to the Dean of Students/Office of Student Conduct, with supporting documentation, for review and verification. Please use the Online Reporting Forms to access/complete/submit the request for a University Excused Absence form for an excuse. Upon receipt, a staff member will verify the documentation and provide an official university excuse, if applicable. The student is responsible for providing the official university excuse issued by the Office for Student Conduct to the professor(s). Questions should be directed to the Dean of Students via email: deanofstudents@pvamu.edu or phone: (936) 261-3550 or Office for Student Conduct via email: studentconduct@pvamu.edu or phone: (936) 261-3524.

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 Catalina
- Smartphone or iPad/tablet with Wi-Fi*
- High-speed internet access
- 8 GB memory
- Hard drive with 320 GB storage space
- 15" monitor, 1024 x 768, color
- Speakers (internal or external)
- Microphone and recording software
- Keyboard & mouse
- Most current versions of Google Chrome, Safari, or Firefox

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

* Some courses may require remote proctoring. Currently, only Chromebooks, laptops, and desktops running Windows or Mac work with our proctoring solution, but iPads are incompatible. Most other applications will work with Android or Apple tablets and smartphones.

Participants should have basic proficiency in the following computer skills:

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

Video conferencing software (Zoom)

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 with 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 the 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 and 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 not speaking, and avoid eating/drinking during the session. Before the class session, test audio, video, and lighting to alleviate technology issues.

Technical Support

Students should go to the Password Reset Tool 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 cits@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 course's readings, lectures, materials, and other aspects 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.

Students are strongly suggested to 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

According to the latest guidelines from PVAMU Health Services, the following measures are in effect until further notice.

- Students who are ill will be asked to adhere to best practices in public health, such as masking, handwashing, and social distancing, to help reduce the spread of illness across campus.
- Students will no longer require mandatory self-reporting. Students will be responsible for communicating with their professors regarding COVID-19, similarly to any other illness.
- There will be no mandatory isolation. Students who are too ill to engage in classroom activities will be responsible for securing the appropriate documentation to support the absence.
- Students who self-isolate will be responsible for communicating with their professors and securing an excuse from Student Conduct.
- All students will have access to <u>timely care</u>, a telehealth platform that provides virtual medical care 24/7 and by appointment in the Student Health Clinic. Students are encouraged to enroll at TimelyCare at the semester's beginning at <u>timelycare.com/pvamu</u>.
- Students can access COVID testing in the Student Health Clinic by appointment. Testing is for students who are symptomatic ONLY.