CHEG 2013 Y01 Materials Science 16914
Fall 2020

General Course Information

<table>
<thead>
<tr>
<th>Information Item</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor:</td>
<td>Dr. Keisha Antoine</td>
</tr>
<tr>
<td>Section # and CRN:</td>
<td>Y01; CRN 16914</td>
</tr>
<tr>
<td>Office Location:</td>
<td>C.L. WILSON 201E</td>
</tr>
<tr>
<td>Office Phone:</td>
<td>936-261-9407</td>
</tr>
<tr>
<td>Email Address:</td>
<td><a href="mailto:keantoine@pvamu.edu">keantoine@pvamu.edu</a></td>
</tr>
<tr>
<td>Office Hours:</td>
<td>MWF 10-11AM; 3-5PM</td>
</tr>
<tr>
<td>Mode of Instruction:</td>
<td>Hybrid</td>
</tr>
<tr>
<td>Course Location:</td>
<td>New Electrical Engineering Bldg 117</td>
</tr>
<tr>
<td>Class Days &amp; Times:</td>
<td>MWF 11:00-11:50AM</td>
</tr>
<tr>
<td>Catalog Description:</td>
<td>CHEG 2013 Materials Science: 3 semester hours. Chemical bonding, atomic order and disorder, transport properties, single phase and multiphase materials, heat treatment, corrosion, and composites.</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>CHEM 1043 (may be taken concurrently) or CHEM 1034 (may be taken concurrently).</td>
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<tr>
<td>Co-requisites:</td>
<td>CHEM 1043 (may be taken concurrently) or CHEM 1034 (may be taken concurrently).</td>
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</table>

Student Learning Outcomes:

Upon successful completion of this course, students will be able to:

<table>
<thead>
<tr>
<th>Program Learning Outcome Alignment</th>
<th>Core Curriculum Outcome Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEO 1</td>
<td>D1</td>
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</tbody>
</table>

1. Chapter 1
   - List six different property classifications of materials that determine their applicability.
   - Cite the four components that are involved in the design, production and utilization of materials and briefly describe the interrelationships.
   - Cite three criteria that are important in the materials selection process.

2. Chapter 2
   - Plot a schematic of attractive, repulsive and net energies versus interatomic separation for two atoms or ions. Note on this plot the equilibrium separation and the bonding energy.
   - Describe ionic, covalent, metallic, hydrogen and van der Waals bonds and note which materials exhibit each of these bonding types.
• Describe the difference in atomic/molecular structure between crystalline and non-crystalline materials.

3. Chapter 3
• Draw unit cells for face-centered cubic and body-centered cubic crystal structures.
• Derive the relationships between unit cell edge length and atomic radius for face-centered cubic and body-centered cubic crystal structures.
• Compute the densities for metals having face-centered cubic and body-centered cubic crystal structures given their unit cell dimensions.
• Given three direction index integers, sketch the direction corresponding to these indices within a unit cell.
• Specify the Miller indices for a plane that has been drawn within a unit cell.
• Distinguish between single crystals and polycrystalline materials.
• Define isotropy and anisotropy with respect to material properties.

4. Chapter 4
• Describe both vacancy and self-interstitial crystalline defects.
• Calculate the equilibrium number of vacancies in a material at some specified temperature, given the relevant constants.
• Name the two types of solid solutions and provide a brief written definition and a schematic sketch of each.
• Calculate the weight percent and atom percent for each element, given the masses and atomic weights of two or more elements in a metal alloy.
• List the different types of dislocations (edge, screw and mixed) and be able to recognize them from sketches.

5. Chapter 5
• Name and describe the two atomic mechanisms of diffusion.
• Distinguish between steady-state and non-steady-state diffusion.
• Know how to apply Fick’s first and second laws for different diffusion processes.
• Calculate the diffusion coefficient for a material at a specified temperature, given the appropriate diffusion constants.

6. Chapter 6
• Define engineering stress and engineering strain.
• State Hooke’s law and note the conditions under which it is valid.
• Apply Poisson’s ratio.
• Determine the a) modulus of elasticity, b) yield strength (0.002 strain offset), c) tensile strength and d) estimate the percent elongation when given an engineering stress-strain diagram.
• Describe changes in specimen profile to the point of fracture for the tensile deformation of a ductile cylindrical specimen.
• Compute ductility in terms of both percentage elongation and percentage reduction in area for a material that is loaded in tension to fracture.
• Name the two most common hardness testing techniques; note two differences between them.
• Compute the working stress for a ductile material.

7. Chapter 7
• Describe how plastic deformation occurs by the motion of edge and screw dislocations in response to applied shear stress.
• Define slip system and cite one example.
• Describe how the grain structure of a polycrystalline metal is altered when it is plastically deformed.
• Explain how grain boundaries impede dislocation motion and why a metal having small grains is stronger than one having large grains.
• Describe and explain solid-solution strengthening for substitutional impurity atoms in terms of lattice strain iterations with dislocations.
• Describe recrystallization in terms of both the alteration of microstructure and mechanical characteristics of the material.
• Describe the phenomenon of grain growth from both macroscopic and atomic perspectives.

8. Chapter 8
• Describe the mechanism of crack propagation for both ductile and brittle modes of fracture.
• Name the two impact fracture testing techniques.
• Define fatigue and specify the conditions under which it occurs.
• Determine the a) the fatigue lifetime (at a specified stress level) and b) the fatigue strength (at a specified number of cycles) from a fatigue plot for some material.
• Define creep and specify the conditions under which it occurs.
• Determine the a) steady-state creep rate and b) the rupture lifetime given a creep plot for some material.

ABET OUTCOMES:
Course Outcome D1: This outcome is the same as program outcome 8. Students will have an ability to identify, formulate, and solve fundamental engineering problems by applying principles of engineering, science, and mathematics.

The two performance criteria used to assess this outcome consist of
1. Ability to identify, sketch, or discuss concepts associated with chemical engineering.
   Students are able to:
   (i) Discuss or present the role of engineers in society, career opportunities, career paths, job environment, and performance expectations.
   (ii) Discuss the ethical and professional responsibilities of chemical engineers.
   (iii) Describe the different chemical processes and how the processes operate.
   (iv) Effectively communicate ideas using both oral and written communications while avoiding dishonesty and plagiarism.
   (v) Prepare a simple report discussing in class experiments.
   (vi) Create a process flow diagram, flow chart, or Gantt chart using Visio.

2. Ability to formulate fundamental chemical engineering concepts such as mass, mole, composition, density and molecular weight.
   Given a problem, the student is able to:
   (i) Perform unit conversions given a conversion table.
   (ii) Convert a given value from mass to moles or moles to mass using molecular weight.
   (iii) Write values using the correct number of significant figures.
   (iv) Depict a number using scientific notation.

3. Ability to solve fundamental chemical engineering problems using engineering problem solving strategies and computer applications software.
   Given a problem, the student is able to:
   (i) Input formulas and perform calculations using Excel or Matlab.
   (ii) Calculate mass fractions or mole fractions given mass/mole amounts.
   (iii) Determine an unknown species through a hands-on density calculation based on measured mass and volume.
Major Course Requirements

Method of Determining Final Course Grade

<table>
<thead>
<tr>
<th>Course Grade Requirement</th>
<th>Value</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Homework</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>2. Quizzes</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>3. Participation-Discussion Posts, In-session chats</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4. Exams</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>5. Final Exam</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

Course Grade Requirement Table

Grading Criteria and Conversion:
A = 90-100 points
B = 80-89 points
C = 70-79 points
D = 60-69 points
F = 59 points and below

A signifies that the student has mastered the subject matter and understands all concepts covered.
B signifies that the student has a good understanding of the subject matter with few exceptions.
C signifies that the student has an adequate understanding of the material and can follow most concepts.
D signifies that the student does not understand important class concepts needed to be successful in future courses.
F signifies that the student has missed significant assignments or does not understand several concepts.

Detailed Description of Major Assignments:

<table>
<thead>
<tr>
<th>Assignment Title or Grade Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Homework</td>
<td>The homework assignments will allow students to gain understanding of the aforementioned learning outcomes.</td>
</tr>
<tr>
<td>2. Quizzes</td>
<td>The quizzes will be administered online and will test student knowledge of the learning outcomes</td>
</tr>
<tr>
<td>3. Exams</td>
<td>Exams will be administered online and will test student knowledge of the learning outcomes. One of the exams may be a group project.</td>
</tr>
<tr>
<td>4. Final Exam</td>
<td>The Final Exam will be administered online and will be a comprehensive exam to test student knowledge of the learning outcomes.</td>
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</table>

Detailed Description of Major Assignments Table

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

Tests & Testing Policy
All tests are open book and open notes. Make-up exams are only available for students with university excused absences. In most cases, the make-up exam is given BEFORE the student misses the exam. No collaboration among students is allowed during the exam. No electronic devices will be allowed including iPads and eReaders. No graphing or programmable calculators are allowed for any test or quiz. Students must purchase a small
scientific calculator to use on exams. A cell phone cannot be used as a replacement for a calculator on an exam. Doing so will result in a zero. No bathroom breaks are allowed during a test. If a student leaves the room during this time, their exam/quiz will be collected and considered finished by the student. Any act of cheating will result in a grade of zero for that student, and the student will be referred to the department head. Such meetings must take place within a week of the violation.

**Homework Policy & Guidelines**

This course involves the usage of computer software. **Students must submit these assignments BEFORE the beginning of class.** If a student chooses to disobey the university’s honor code and copy the solution manual instead of submitting the student’s own independent work, the student will receive a grade of zero on the assignment and will be referred to the department head. Such meetings must take place within a week of the infraction. Staple assignment if it is more than one page. Write your name, date, and assignment number on the front page. Homework is due at the beginning of the class period. **Late homework assignments will NOT be accepted.**

**Class Activities And Participation**

Classes are hybrid and as such will be administered in face-to-face format and internet-synchronous online sessions over ZOOM. Given the pandemic, additional flexibility is permitted to allow for a HyFlex approach to Hybrid courses as well, e.g., the 15% minimum Face-to-Face component may be satisfied using synchronous Zoom-based meetings. Thus, **ALL classes will be delivered in internet-synchronous online sessions over ZOOM,** and these sessions will count towards the face-to-face requirement. Additionally, all sessions will be recorded and posted to Canvas. Students are expected to attend class sessions on a regular basis and are expected to participate in classroom discussions. Students must submit these assignments during a given time frame.
<table>
<thead>
<tr>
<th>Modules</th>
<th>Topic</th>
<th>Online Assignment/Activity (Due Date)</th>
<th>Assignment/Activity (Face-to-Face[F2F])</th>
</tr>
</thead>
</table>
| Module 1 | Course Introduction; Meet & Greet; Review of Syllabus; Introduction to Materials Science | • Review the syllabus *(August 24, 2020)*  
• Chapter 1 *(August 28, 2020)* | • TBD |
| Module 2 | Atomic Structure | • Chapter 2 *(August 31, 2020 – September 11)* | • TBD |
| Module 3 | Atomic and Ionic Arrangements | • Chapter 3 *(September 14-23, 2020)*  
• Test 1 (online) | • TBD |
| Module 4 | Imperfections in Solids | • Chapter 4 *(September 28-October 7)* | • TBD |
| Module 5 | Atom and ion movements in materials | • Chapter 5 *(October 9-16, 2020)* | • TBD |
| Module 6 | Mechanical Properties of Materials | • Chapter 6 *(October 21-November 4, 2020)* | • TBD |
| Module 7 | Deformation and Strengthening Mechanism | • Chapter 7 *(November 6-13, 2020)* | • TBD |
| Module 8 | Deformation and Strengthening Mechanism | • Chapter 8 *(November 16-20)* | • TBD |
| Final Exam | Final Exam Review | (November 23, 2020) |  |
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. Phone: 936-261-1500; Website: J. B. Coleman Library.

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 the student is unsure of the best resource for their needs. Some students are supported by faculty advisors 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. You can find your advisor's location by academic major at the Academic Advising Website. 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 is offered face-to-face in the UTC, in virtual face-to-face sessions, and through online sessions at 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: University Tutoring Center.

The Writing Center
The Writing Center provides well-trained peer tutors that 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. Student must register for Grammarly by using their student email address. In addition, students have access to face-to-face as well as virtual tutoring services either asynchronously via email or synchronously via Zoom. Location: J. B. Coleman Library, Rm. 209; Phone: 936-261-3724; Website: The Writing Center; Grammarly Registration.

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 Alert helps 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 PVPlace and click on Academic Early Alert on the left sidebar. Phone: 936-261-5902; Website: Academic 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 provides assistance to 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: Student Counseling Services.
Office of Testing Services
Testing Services serves to create opportunities by offering 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: Testing Services.

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 hardware and software, adapted furniture, proctoring of 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: Disability Services.

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-assisted and 2-way video course delivery. For more details and contact information, visit: CIITS Student Webpage; Phone: 936-261-3283.

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

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: Office for Student Engagement.

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: Career Services.

University Rules and Procedures
Academic Misconduct (See Student Planner)
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 Planner, especially the section on academic misconduct (see University Administrative Guidelines on Academic Integrity). Students who engage in academic misconduct are subject to university disciplinary procedures. As listed in the PVAMU Undergraduate Catalog, Graduate Catalog, and the Student Planner, 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 or to have attempted to commit the following academic misconduct may also be subject to disciplinary review and action as outlined in the PVAMU Student Planner.
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. **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.

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

5. **Fabrication of Information/Forgery**: Use or submission of contrived, invented, forged, or altered information in any assignment, laboratory exercise, or test; tampering with or production of a counterfeit document, particularly documents which make up the student’s academic record. Examples: making up a source or citing nonexistent publication or article; representing made up data as real for an experiment in a science laboratory class; forging a change of grade or student withdrawal record; falsifying any document related to a student academic exercise.

**Nonacademic Misconduct (See Student Planner)**
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, or (2) the ability of students to benefit from the instructional program, or (3) 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 Office for Student Conduct 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 the Title IX Webpage 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 condition, 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. More information can be found at this webpage.

**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 936-261-1744 or 1792.

**Class Attendance Policy (See Catalog for Full Attendance Policy)**
Prairie View A&M University requires regular class attendance. Attending all classes supports 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 internet. 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 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 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 University Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint. Students can file Academic Complaints and/or Grade Appeals at this webpage.

**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

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

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

**Participants should have a basic proficiency of the following computer skills:**
- Sending and receiving emails
- 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 discussions 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 session. Before class session begins, 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 (CIITS) 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 take place in a seminar fashion. This will be accomplished by the use of the discussion board. The exact use of discussion will be determined by the instructor.

It is strongly suggested that students type their discussion postings in a word processing application 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 [NOTE: Delete this section when the COVID-19 pandemic is over]
To promote public safety and protect students, faculty, and staff during the COVID-19 pandemic, Prairie View A&M University has adopted policies and practices for the Fall 2020 academic term to limit virus transmission. Students must observe the following practices while participating in face-to-face courses and course-related activities (office hours, help sessions, transitioning to and between classes, study spaces, academic services, etc.):

- **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.) must be properly worn in all non-private spaces including 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 difficult to reliably maintain.

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

- **Classroom Ingress/Egress** - Students should follow marked pathways for entering and exiting classrooms and other teaching spaces. Students should leave classrooms promptly after course activities have concluded, should not congregate in hallways and should maintain 6-foot physical distancing when waiting to enter classrooms and other instructional spaces.

- **Face-to-face Class** - To attend a face-to-face class, students must wear a face covering (or a face shield if they have an exemption letter). If a student refuses to wear a face covering, the instructor should ask the student to leave and join the class remotely. If the student does not leave the class, the faculty member should report that student to the Office for Student Conduct for adjudication. Additionally, the faculty member may choose to teach that day’s class remotely for all students.
• **COVID-19 Guidelines for Student Conduct Adjudication** - The mandatory COVID-19 Training/Certification taken by all students serves as the 1st Warning for violation of COVID-19 Guidelines.
  
  o 1st incident: upon review of Incident Report and finding of responsibility — Conduct Probation
  
  o 2nd incident: upon review of Incident Report and finding of responsibility — Suspension
  
  o Consult the Code of Student Conduct in the Student Planner or [Student Conduct website](#) for additional information on Conduct Probation and Suspension.

• **Personal Illness and Quarantine** - Students required to quarantine must 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, [studentconduct@pvamu.edu](mailto:studentconduct@pvamu.edu).