Roy G. Perry College of Engineering Introduction to Engineering, Computer Science, and Technology CHEG 1011, COMP 1011, CVEG 1011, ELEG 1011 and MCEG 1011

Fall Semester 2018

Instructors: Dr. Kelvin Kirby (Primary) Dr. Jianren Zhou Mr. Ravi Iyengar

<u>kkkirby@pvamu.edu</u> <u>jizhou@pvamu.edu</u> <u>rniyengar@pvamu.edu</u>

Dr. Emmanuel Nzewi
eunzewi@pvamu.edu
Dr. Michael Gyamerah
Dr. Emmanuel Dada
migyamerah@pvamu.edu
eadada@pvamu.edu

Office Hours: MTWRF 10:00am to 12:00 Noon Room 315-H New Electrical Engineering Building (NENR)

Phone: 936 261-9914

Course Description: Introduction to basic engineering, computer science and technology concepts. Students will become aware of the various disciplines of engineering, computer science and technology, ethical and professional responsibilities in these fields, creativity and design.

Co-requisites: Respectively, CHEG 1021, COMP 1021, CVEG 1021, ELEG 1021 and MCEG 1021.

Course Objectives: This course focuses on familiarizing incoming Roy G. Perry College of Engineering students to engineering as a discipline in general. This course will develop the student's knowledge base to prepare them for **studying engineering** and becoming successful engineers, computer scientists or technologists in their chosen professions.

Course Outcomes: The following **ABET Outcome** will be assessed:

Student Outcome 4: An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

Required Text:

Studying Engineering – A Road Map to a Rewarding Career, Fourth Edition, Raymond B. Landis, Discovery Press, ISBN-978-0-9793487-4-7, ISBN 9780979348747

Course Topics and Assignments: Read Each Chapter Before the Scheduled Lecture

- **Chapter 8**: Orientation to Engineering Education

Week of

Class 1 – Aug 27	- Class Intro, Syllabus, Structure of Roy G. Perry College of Engineering and MATH ENROLLMENT!
Class 2 – Sep 3	- Consolidation Week: The Engineering Profession – The Engineering Departments and Degree Plans
Class 3 – Sep 10	- Chapter 1: Keys to Success in Engineering Study (Goals)
Class 4 – Sep 17	- Chapter 6: Personal Growth and Student Development (Communicating Effectively)
Class 5 – Sep 24	- Exam I
Class 6 – Oct 1	- Chapter 3: Understanding the Teaching / Learning Process (Learning Styles)
Class 7 – Oct 8	- Chapter 4: Making the Most of How You are Taught
Class 8 – Oct 15	- Exam II
Class 9 – Oct 22	- Chapter 2: The Engineering Profession
Class 10 – Oct 29	- Chapter 5: Making the Learning Process Work for You – Project – World Class Engineer/Student
Class 11 – Nov 5	- Exam III
Class 12 – Nov 12	- Chapter 7: Broadening Your Education (Handout: Professional and Ethical Responsibility)
Class 13 – Nov 19	- Thanksgiving Holidays – November 22 – 23, 2018

Course Requirements:

Class 14 – Nov 26

Class 15 – Dec 3

Attendance – **Attendance** is **required**. There may be guest speakers for selected classes and it is important that class starts on time and proceeds with minimal interruptions. Students are required to sign-in at the beginning of every class. Points will be deducted from the student's final course grade for both absences and late arrivals.

- Review and Finals: Exam IV - Final Exam Schedule

Participation / Assignments — Out-of-class assignments will be given during this course. The purpose of these assignments is to allow the student to gain further insight into the concepts discussed in the course. Assignments must be turned in at the designated time and all assignments combined will count a percentage of the student's final lecture grade. No late assignment will be accepted.

Course Syllabus: CHEG 1011, COMP 1011, CVEG 1011, ELEG 1011 and MCEG 1011

Key Assignments – During the semester one or more assignments will be designated as key assignments. In order to pass the class the student must submit all key assignments. If any key assignment is not submitted, the student will not pass the class. Assignments that are key assignments will be announced at the time of the assignment. The key and other assignments, taken together, will be worth 20% of the course.

Examinations – There will be four exams given during this course. There will be no make-up examinations. The student must take all exams at the scheduled times. The four exams will count 20% each towards the student's overall grade, the assignments will account for 20% of the final grade.

Grading Scale: Course grades will be earned based on the following criteria: A = 90% and above, B = 80% - 89%, C = 70% - 79%, D = 60% - 69%, F = 59% - 0%.

University Policies:

Student Evaluation of Teaching: Each student will be asked to complete feedback forms (Student Opinion Surveys) at the end of the semester concerning this course.

Absences Based on Religious Beliefs: In accordance with Texas Education Code, Section 51.925, subchapter (Z), a student may be absent from classes for the observance of a religious holy day and will be permitted to take missed examinations and complete missed assignments provided the student has notified the instructor of the planned absence in writing and receipt of the notice has been acknowledged by the instructor in writing. "A religious holy day means a holy day observed by a religion whose place of worship is exempt from property taxation under the Texas Tax Code, Section 11.20."

Americans with Disabilities Act: The Office for Disability Services is responsible for achieving and maintaining program accessibility for all students who **self-identify** as having an officially documented disability (Rehabilitation Act, Section 504 and Americans with Disability Act). Students are encouraged to become self-advocates; however, the Office for Disability Services provides leadership in advocating for removal of attitudinal and physical barriers that may impede successful progression toward achievement of the student's educational objectives. Students requesting service through the Office of Disability Services must submit all documentation and meet all eligibility requirements each semester. Services are determined based on individual assessment, but generally involve academic adjustments that will support the student's access to programs and services within the University. For information about the complaint and appeal procedure and other services available from the Office for Disability Services, visit Evans Hall, Room 315 or call (936) 261-3581.

Academic Dishonesty: Course credit, degrees, and certificates are to be earned by students and may not be obtained through acts of dishonesty. 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. 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. Each instance of academic dishonesty should be reported to the department in which the student has declared a major so that it can become a part of the student's file; to the department head of the instructor of the course in which the alleged infraction occurred; and to the Office for Academic Affairs as deemed necessary.

Inclement Weather Policy: In the event that weather or other conditions are such that normal campus operations could be impeded the following policy will apply for this class. If the University is closed, this class will not meet. Any assignments due or examinations scheduled will be due or rescheduled for the next class period that the class meets. Local media will announce any university closings.

Student Success: PVAMU supports a variety of student success programs to help the student connect with the university and achieve academic success. They include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Affairs.

Email to Faculty. To contact a faculty member, use the email address shown on the top of the syllabus. Use as the "subject line": (ELEG 1011 or MCEG 1011), put your full name inside the email, start with the main point / question of the message. Email correspondence from outside the PVAMU domain is subject to being treated as Spam by the server and deleted.

Notice: The instructors reserve the right to make changes to the course syllabus as necessary. It is the student's responsibility to keep up with changes to the syllabus as posted in the class.

Textbooks: Required see policy: http://www.pvamu.edu/pages/195.asp

Rules: NO hats, NO cell phones, NO electronics, NO Weapons during class or exams.