Course Title: Professional Engineering  
Course Prefix: CVEG  
Course No.: 3051  
Section No.: P01  

Department of Civil & Environmental Engineering  
College of Engineering  

Instructor Name: Dr. I. Ahmed, P.E., CPESC  
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P.O. Box 519  
Mail Stop 2510  
Prairie View, TX 77446  

Office Hours: MW: 2:00-4:00; T: 2:00-4:00; R: 10:00 – 11:00; 2:00-4:00 ; OR, BY APPOINTMENT  
Virtual Office Hours: None  

Course Location: C.L. Wilson, Room 109K  
Class Meeting Days & Times: 5-7:50pm, Tuesdays  

Catalog Description: (Revised here by Dr. Ahmed to fit the new FE Exam Format)  

Prerequisites: (As appears in the catalog)  
MATH 2043; CHEG 2003; ELEG 1043 or COMP 1213; CVEG 2053 or 2454; ELEG 2023 or 2053; CHEG 2043 or MCEG 2013; CHEG 2013 or MCEG 2023 or ELEG 3033; and CHEG 3023 or CVEG 3063 or ELEG 3063 or MCEG 3063.  

Co-requisites: None  


Recommended Text/Readings: FE Review Manual for Civil Engineering  

Access to Learning Resources:  
PVAMU Library:  
phone: (936) 261-1500;  
web: http://www.tamu.edu/pvamu/library/  
University Bookstore:  
phone: (936) 261-1990;  
web: https://www.bkstr.com/Home/10001-10734-1?demoKey=d  

Course Goals or Overview:  
To have students demonstrate an understanding of the subjects that are covered on the CIVIL Fundamentals of Engineering (FE) Exam through the use of individually based review of topics, peer-to-peer review sessions, and problem solving skills.  

Course Outcomes/Objectives  
At the end of this course, the student will  

1 Be able to demonstrate an ability to solve FE style problems for the subjects covered in the Civil FE Exam  
2 Understand the importance of the FE license and the path to becoming a Professional Engineer
Course Requirements & Evaluation Methods

Students will be evaluated based on their performance on in-class examinations, a 5-hour mock FE exam, and documentation of engagement in weekly study sessions.

General Topics Covered
- Statics
- Dynamics
- Mechanics of Materials
- Materials (Civil Engineering Materials Lab Topics; Not Material Science topics)
- Engineering Economics
- Ethics
- Fluid Mechanics (CVEG 3063)
- Hydrologic and Hydraulic Systems (CVEG 4063): Take Home Test
- Geotechnical Engineering
- Structural Analyses and Design (RC and Steel): Take Home Test
- Transportation Engineering
- Environmental Engineering (CVEG 3043/4043): Take Home Test
- Mathematics (Calculus I, II), Probability and Statistics
- Computers

Grading Policy
Final grade will be determined based on the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance/Weekly Studies</td>
<td>10%</td>
</tr>
<tr>
<td>Subject Exams (pass 70% of the tests or more)</td>
<td>60%</td>
</tr>
<tr>
<td>5-hour Mock FE Exam with 110 questions (earn a minimum of 70%)</td>
<td>30%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
</tr>
</tbody>
</table>

Course Grading Scale
- A = 90 to 100
- B = 80 to 89
- C = 70 to 79
- D = 60 to 69
- F = 00 to 59

Important Dates
- Student Academic Appeals Process (Undergraduate Catalog, 2008-2010, pp. 70-71)
  Calendar (Spring 2014):
    - Last day to drop course without record: February 3, 2016
    - Spring Break: March 14 – 19, 2016
    - Last day to withdraw from classes with an automatic “W”: April 4, 2016
Course Procedures

Weekly Study Session Log Sheets
The weekly study session log sheets are to be submitted at the beginning of each class.

Exam Policy
Exams should be taken as schedule. No makeup examinations will be allowed except under documented emergencies (See Student Handbook)

<table>
<thead>
<tr>
<th>Week Number</th>
<th>Tuesday</th>
<th>Topic Covered</th>
<th>Total Problems</th>
<th>Timed Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 19</td>
<td>Course Introduction, FE Exam Format Changes</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Others</td>
<td>Tuesdays</td>
<td>Crash Reviews of Selected “Fundamental” topics + Subject Exam (No Scantrons)</td>
<td>15</td>
<td>Yes</td>
</tr>
<tr>
<td>15</td>
<td>April 30 (Sat)</td>
<td>5-hour Mock FE Exam (Scantrons Only)</td>
<td>100</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Additional Notes
- **Attendance in the class is mandatory and students are expected to report to class On Time.** If you know that you will be late to class or have to leave class early, please speak with or email the instructor before class and enter/leave the classroom quietly. Attendance will be taken at the beginning of class and may be taken at the end of class. Please read the attached University Class Attendance Policy.
- **You are expected to do crash review each week for the upcoming weekly subject test to show you can prepare on your own; The instructor will give short 1-hour review on most of the topics before the respective 2-hour subject tests every Tuesday.**
- **You must bring the NCEES formula book (printed or on your tablet or laptop) for use during the test; All other support materials are prohibited.**
- **Turn cell phones and other electronic devices off prior to the start of class.** They must remain off while class is in session whether we are in the classroom or outside the classroom. **If you are expecting an emergency call, please keep the cell phone in vibration mode and exit the classroom to take the call. The instructor will keep his in vibration mode for any University emergency messages.**
- **No Make-up exams will be given in this class.**
- **Late weekly study logs will not be accepted.**
- **The mock exam is comprehensive.**
- **Cheating on an exam and other forms of academic dishonesty will result in “F” on respective tests and possible referral with the maximum penalty recommended**
- **Grading/class related Appeals (see undergraduate catalog)**

Course Assessment
Students will be evaluated based on their performance in class examinations. ABET Criteria 3(a, e, f, i, and k) will be measured for this course.

ABET Criterion 3. Program Outcomes and Assessment
Students who graduate with a BSCE degree from the Civil & Environmental Engineering Department will have
(a) an ability to apply knowledge of mathematics, science, and engineering.
(b) an ability to design and conduct experiments, as well as to analyze and interpret data.
(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
(d) an ability to function on multi-disciplinary teams.
(e) an ability to identify, formulate, and solve engineering problems.
(f) an understanding of professional and ethical responsibility.
(g) an ability to communicate effectively.
(h) the broad education necessary to understand the impact of engineering solutions in a global and societal context.
(i) a recognition of the need for, and an ability to engage in life-long learning.
(j) a recognition of contemporary issues.
(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

College of Engineering Textbook Policy – Students MUST acquire the required textbook that is listed on the course syllabus for this course. The textbook must be acquired by the 10th class day. Students are not allowed to share textbooks with students who are currently registered in the same class. Failure to acquire (or show proof of purchase) the required textbook by the 10th class day will result in the student being administratively dropped from the course. The University will assess financial obligations for the course to the student as with any other dropped class according to the fee schedule as well as your financial aid may be affected.

If you are not financially able to purchase a required textbook for an engineering course prior to the 10th class day, you may apply to the College of Engineering Textbook Fund for a textbook voucher. The voucher can only be used at the Campus Bookstore. This voucher is a loan and must be paid back to the College of Engineering prior to the start of pre-registration for the coming semester. If the loan is not repaid, a hold will be placed on your account. Additional information and application materials can be obtained from the Assistant Dean’s Office (SR Collins, Room 349) and obtained online at the College of Engineering website under student resources.

This policy is only for students who have declared a major (Engineering, Computer Science, and/or Technology) in the Roy G. Perry College of Engineering.

University Rules and Procedures

Disability Statement (See Student Handbook): Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

Academic Misconduct (See Student Handbook): You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

University Policy on Academic Honesty: 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. The university’s policy on academic dishonesty is stated below:

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.

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 mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
3. Fabrication: use of invented information or falsified research.
4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else’s words, ideas, or data as one’s own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one’s own work also constitutes plagiarism.

Nonacademic misconduct (See Student Handbook): The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor’s ability to conduct the class, (2) the inability of other
students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

**Sexual misconduct (See Student Handbook):** Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

**Class 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. 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.

**Excused Absences:** Absences due to illness, attendance at university approved activities, and family or other emergencies constitute excused absences and must be supported by documentation presented to the instructor prior to or immediately upon the student’s return to class. Students are always responsible for all oral and written examinations as well as all assignments (e.g., projects, papers, reports).

**Excessive Absences:** Accumulation of one week of unexcused absences (for the number of clock hours equivalent to the credit for the course) constitutes excessive absenteeism. The instructor is not required to accept assignments as part of the course requirement when the student’s absence is unexcused.

**Absences on Religious Holy Days:** 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.”

**Student Academic Appeals Process:** Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.