Course Title: Emerging Issues in the Civil Engineering Profession
Course Prefix: CVEG  Course No.: 2001  Section No.: P01

Department of Civil & Environmental Engineering  College of Engineering

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P.O. Box 519  Mail Stop 2510
Prairie View, TX 77446

Office Hours: 11am-12pm & 4pm-5pm on Mon and 2pm-5pm on Tues  Virtual Office Hours: 2pm-3pm on Tues

Course Location: C.L. Wilson Building, Room 103  Class Meeting Days & Times: Monday, 2pm to 3:50pm

Catalog Description: CVEG 2001 (0-2) Credit 1 semester hour. An overview of emerging issues and state-of-the-art technologies embraced by the Civil Engineering profession. The course will emphasize basic concepts in management, entrepreneurship, public policy, leadership, teamwork and team building, oral and written communication, and the presentation of appropriate engineering design documentation.

Prerequisites: CVEG 1011, CVEG 1021, and classification of Sophomore and higher  Co-requisites: None


Recommended Text/Readings: None

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:
The goal of this course is to emphasize the use of teamwork and team building skills to write and present appropriate engineering design documentation. The course will also introduce the basic concepts in management, entrepreneurship, public policy, leadership and teamwork.

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

1. Be able to use state-of-the-art technologies embraced by the Civil Engineering profession
2. Be able to interpret a set of blueprints and specifications relating to a civil engineering project.
3. Be able to communicate their ideas in oral and in written form
4. Apply business principles used by engineers to conduct their work.
5. Work within a group to complete an engineering design project.
Course Requirements & Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

- **Exams** – written tests designed to measure knowledge of presented course material
- **Homework Exercises** – written assignments designed to supplement and reinforce course material
- **Group Projects** – group assignment designed to measure ability to apply presented course material
- **TaskStream Assignments** – assignments designed to engage students in the accreditation process

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Value (points or percentages)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Exercises</td>
<td>20 percent</td>
<td>20</td>
</tr>
<tr>
<td>Mid-Term Exam</td>
<td>20 percent</td>
<td>20</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20 percent</td>
<td>20</td>
</tr>
<tr>
<td>Group Project</td>
<td>30 percent</td>
<td>30</td>
</tr>
<tr>
<td>TaskStream Assignments</td>
<td>10 percent</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Grade Determination:**
- A = ≥ 90 percent;
- B = ≥ 80 percent but < 90 percent;
- C = ≥ 70 percent but < 80 percent;
- D = ≥ 60 percent but < 70 percent;
- F = < 60 percent

The final numerical grade for the course will be rounded up to the next highest whole number if the first number past the decimal point is greater than or equal to five. For example, a final numerical grade of 79.5 would be rounded up to 80 and a letter grade of B, instead of C would be awarded. A final numerical grade of 89.4 would NOT be rounded up to 90 and a final grade of B would be awarded.

Course Procedures

**Submission of Assignments:**
- Late homework will not be accepted for a grade.
- The ability to work in groups is an important part of being a civil engineer. Students who fail to actively participate in the group projects required in this class (formal projects as well as in-class assignments) may receive a lower grade than those members of the group who actively participated in the work. Problems within groups should be brought to my attention **promptly**.

**Formatting Documents:**
The format for submitting specific homework assignments will be discussed when they are assigned. At a minimum, the response should be word processed, spell checked, written with appropriate grammar, and presented in an easy to follow format. For assignments calling for a specific number of pages, a page is approximately 400 words (based on the word processing program’s word count function). Each assignment should contain the student’s first and last name, course number and name, and date submitted. Multiple pages should be stapled together.

**Exam Policy**
- Quizzes, including unannounced quizzes, may be given at any time. No makeup quizzes or mid-term exams will be given. If you miss a quiz or the mid-term exam due to an unexcused absence, you will receive zero credit for that quiz or exam. If you have an excused absence and miss a quiz, your quiz average will be based on the quizzes taken throughout the semester. If you miss the mid-term exam due to an excused absence, the final exam will count for both the mid-term and final exam. Failure to take the final examination will result in an automatic grade of “F” for the course.
- Students should bring a stand alone calculator (cell phone calculators are not permitted) to all class meetings. Sharing of calculators will not be permitted.
- Once a quiz or exam begins, students are not permitted to leave the class room until they are finished with the quiz/exam.
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Chapter (s):</th>
<th>Assignment (s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>No Class – MLK Holiday</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Week 2</td>
<td>Course Maintenance &amp; Communication Skills</td>
<td>None</td>
<td>Resume and Business Card</td>
</tr>
<tr>
<td>Week 3</td>
<td>Is Engineering Really a Profession</td>
<td>Chapter (s): Read Chapter 1</td>
<td>Assignment (s): Problems #3 and #5</td>
</tr>
<tr>
<td>Week 4</td>
<td>Engineering Challenges</td>
<td>Chapter (s): Read Chapter 3</td>
<td>Assignment (s): Problems #6 and #11</td>
</tr>
<tr>
<td>Week 5</td>
<td>Engineering Education, Employment, and Salaries</td>
<td>Chapter (s): Read Chapters 4, 5 and 8</td>
<td>Assignment (s): Problems #2 &amp; #13 (Chap 4), Problems #1 &amp; #5 (Chap 5), and Problems #1 &amp; #4 (Chap 8)</td>
</tr>
<tr>
<td>Week 6</td>
<td>Design &amp; Development, Basic Concepts in Teamwork/Team Building</td>
<td>Chapter (s): Read Chapter 7</td>
<td>Assignment (s): TBD</td>
</tr>
<tr>
<td>Week 7</td>
<td>Business Concepts in Management, Entrepreneurship, Public Policy, and Leadership</td>
<td>Chapter (s): Read Chapter 10</td>
<td>Assignment (s): TBD</td>
</tr>
<tr>
<td>Week 8</td>
<td>Mid-Term Exam</td>
<td>Chapter (s): None</td>
<td>Assignment (s): None</td>
</tr>
<tr>
<td>Week 9</td>
<td>Professional Registration, Engineering Societies, and Ethics and Public Responsibility</td>
<td>Chapter (s): Read Chapters 9, 11 and 12</td>
<td>Assignment (s): Problem #1 (Chap 9), Problem #2 (Chap 11), and Problem #1 (Chap 12)</td>
</tr>
<tr>
<td>Week 10</td>
<td>Introduction to Group Project/Introduction to Software (e.g., Bentley, Microsoft)</td>
<td>Chapter (s): None</td>
<td>Assignment (s): None</td>
</tr>
<tr>
<td>Week 11</td>
<td>Blueprint Reading/Appropriate Engineering Design Documentation/Group Project</td>
<td>Chapter (s): Handouts</td>
<td>Assignment (s): TBD</td>
</tr>
<tr>
<td>Week 12</td>
<td>Group Project</td>
<td>Chapter (s): None</td>
<td>Assignment (s): None</td>
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<tr>
<td>Week 13</td>
<td>Group Project</td>
<td>Chapter (s): None</td>
<td>Assignment (s): None</td>
</tr>
<tr>
<td>Week 14</td>
<td>Group Project</td>
<td>Chapter (s): None</td>
<td>Assignment (s): None</td>
</tr>
<tr>
<td>Week 15</td>
<td>Group Project</td>
<td>Chapter (s): None</td>
<td>Assignment (s): None</td>
</tr>
<tr>
<td>Week 16</td>
<td>Group Project Presentations and Review for Final Exam</td>
<td>Chapter (s): None</td>
<td>Assignment (s): None</td>
</tr>
</tbody>
</table>

Week Sixteen – Final Exam – Wednesday, May 4, 2016, 1:30pm to 3:30pm
**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.*

**Course Assessment**

Students will be evaluated based on their performance in class examinations, homework, quizzes, and group projects. ABET Criteria 3(d) and 3(k) will be measured for this course.

**Civil Engineering Program Objectives and ABET 2000 Criterion 3**

Civil Engineering program graduates will

1. have careers in civil engineering or related fields that lead to increasing levels of responsibility and leadership
2. obtain professional licensure/certifications
3. complete graduate studies in civil engineering or related fields
4. engage in professional development and service

**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.
### Mapping of Courses onto PEOs and Program Outcomes

<table>
<thead>
<tr>
<th>Course No</th>
<th>Course Title</th>
<th>CVEG Program Educational Objectives</th>
<th>CVEG Student Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVEG 1011</td>
<td>Intro to Engineering</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CVEG 1021</td>
<td>Intro to Civil Engineering</td>
<td>X</td>
<td>X</td>
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<tr>
<td>CVEG 2001</td>
<td>Emerging Issues in CE Prof</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CVEG 2043</td>
<td>Engineering Mechanics I</td>
<td>X</td>
<td>M</td>
</tr>
<tr>
<td>CVEG 2061</td>
<td>Materials &amp; Dynamics Lab</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CVEG 2063</td>
<td>Mechanics of Materials I</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CVEG 2081</td>
<td>Surveying &amp; Geospatial</td>
<td>X</td>
<td>D</td>
</tr>
<tr>
<td>CVEG 3023</td>
<td>Geotechnical Engineering</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CVEG 3031</td>
<td>Concrete &amp; Steel Lab</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CVEG 3034</td>
<td>Environmental Engineering</td>
<td>X</td>
<td>M</td>
</tr>
<tr>
<td>CVEG 3051</td>
<td>Professional Engineering I</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CVEG 3053</td>
<td>Transportation Engineering</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CVEG 3063</td>
<td>Hydraulics</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CVEG 3073</td>
<td>Structural Analysis I</td>
<td>X</td>
<td>X</td>
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<tr>
<td>CVEG 3083</td>
<td>Steel Design</td>
<td>X</td>
<td>X</td>
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<tr>
<td>CVEG 4013</td>
<td>Reinforced Concrete</td>
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<td>X</td>
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<tr>
<td>CVEG 4021</td>
<td>Geotechnical Engineering Design</td>
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<tr>
<td>CVEG 4043</td>
<td>Environmental Eng Design</td>
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<td>X</td>
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<tr>
<td>CVEG 4053</td>
<td>Transportation Eng Design</td>
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<td>X</td>
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<tr>
<td>CVEG 4063</td>
<td>Water Resources Eng.</td>
<td>X</td>
<td>X</td>
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<tr>
<td>CVEG 4072</td>
<td>Systems Engineering and Management</td>
<td>X</td>
<td>X</td>
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<tr>
<td>CVEG 4141</td>
<td>Engineering Management &amp;</td>
<td>X</td>
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<tr>
<td>CVEG 4472</td>
<td>Sr. Design &amp; Professionalism I</td>
<td>X</td>
<td>X</td>
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<tr>
<td>CVEG 4482</td>
<td>Sr. Design &amp; Professionalism II</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**X** means the Program Objective is achieved  
**M** means that the skills described in the program outcome is covered in greater details and measured in the course.  
**D** design of experiments

**Note:** In addition, evidence will be collected to demonstrate the satisfaction of CE Program Criteria for the following: I) Application of probability and statistics to address uncertainty; II) the inclusion of principles of sustainability in design; III) explanation of basic concepts in Management, Business, Public Policy and Leadership; IV) the analysis of issues in professional ethics.

**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 me 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.
- 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 silence mode and exit the classroom to take the call.
- Course review will be provided for the final exam on the designated date.
- No makeup test(s) will be given. If you have an excused absence please discuss with me ahead of time.
- Late assignments will not be accepted. The format for submitting homework will be discussed on the designated
dates. At a minimum, the response should be word processed and presented in an easy to follow format.

- The final exam is comprehensive. Failure to take the final examination will result in an automatic “F” grade.
- Cheating on an exam or homework and other forms of academic dishonesty will result in referral with the maximum penalty recommended.
- Grading/class related Appeals (see undergraduate catalog)

Important Semester Dates

- Week 1 – MLK Holiday, Monday, January 18, 2016
- Week 1 – First Class Day, Tuesday, January 19, 2016
- Week 2 – General Assembly for all Students on Thursday, January 28, 2016
- Week 3 – Last Day to Withdraw from Course(s) without academic record is Wednesday, February 3, 2016
- Week 3 – Withdrawal from course(s) with academic record (“W”) Begins on Thursday, February 4, 2016
- Week 8 – Mid-Semester Examination Period, Thursday – Saturday, March 10-12, 2016
- Week 9 – Spring Break, Monday – Friday, March 14-19, 2016
- Week 10 – Instruction Resumes – Monday, March 21, 2016
- Week 10 – Mid-Semester Grades Due on Tuesday, March 22, 2016
- Week 10 – Good Friday/Easter Holiday, Friday-Saturday, March 25-26, 2016
- Week 11 – Founders Day/Honors Convocation, Wednesday, March 30, 2016
- Week 12 – Withdrawal from course(s) with academic record (“W”) Ends on Monday, April 4, 2016
- Week 13 – Priority Registration Begins for Summer/Fall 2016 on Tuesday, April 12, 2016
- Week 16 – Last Class Day for Spring Semester, Tuesday, May 3, 2016

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.