EE 1305 Introduction to Electrical Engineering (18622)     Fall 2014
Classroom Building, Room 301        MW: 7:30 – 8:50 AM

Instructor: Dr. Benjamin C. Flores, Professor of Electrical & Computer Engineering
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Office Hours: Monday and Wednesday 3:00 to 4:00 pm or by appointment

Text: Introduction to Electric Circuits, by Prof. Scott Starks (UTEP)

Purpose of Course: To ensure that EE freshmen learn fundamentals of the discipline, develop and practice skills needed for their success in the academic program, and reflect on the career of their choice.

Course Objectives: At the end of the semester the students will:

- Begin to understand their role and responsibilities as a major in the Department of Electrical and Computer Engineering.
- Be aware of opportunities to enhance their future success within the Department of Electrical and Computer Engineering.
- Have learned about and practiced essential academic skills in order to strengthen performance in their chosen major, electrical and computer engineering.
- Begin to build a strong network of faculty, staff, and peers in order to create a supportive and positive learning experience/environment.
- Begin to assess and better understand their own interests, abilities and values in order to more efficiently pursue your academic, career, and life goals.
- Have established a firm foundation in the basic principles of electric circuits.
- Designed a process to become a “World Class Electrical Engineering Student.”

Scientific Calculator: An inexpensive scientific calculator is REQUIRED for this class. Only models of calculators approved for the FE Exam are permitted for use in this class. These include any fx-115 Casio model calculator, all HP 33s and HP 35s models (Hewlett Packard) and all TI-30X or TI-36 models (Texas Instruments). Students should bring their calculator to class daily.

Students will not be allowed to use a cell phone, tablet or laptop in lieu of a scientific calculator on any in-class tests.

Journal: Students are required to maintain a notebook to fully document:
1. Class notes
2. Assignments
3. Questions and perspectives gained from reading assignments
4. A viewpoint summary for each section of *Studying Engineering*

**Grading:** The course will be based on the following:

1. Journal (10%)
2. Readiness assessment tests and one-minute essays (10%)
3. Two mid-term exams (20% each)
4. Term paper (10%)
5. Report on EE senior project presentations and two college of Engineering events (10%)
6. Final exam (20%)

There will be no curving of grades in this course. The grading scale is:

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<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
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<tr>
<td>80 – 89</td>
<td>B</td>
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<tr>
<td>70 – 79</td>
<td>C</td>
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<tr>
<td>60 – 69</td>
<td>D</td>
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<tr>
<td>&lt; 60</td>
<td>F</td>
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**Attendance:** Attendance is mandatory. Excused absences will be granted according to the rules in the University Catalog. Students with more than four unjustified absences will be dropped from the course.

**Class Participation:** Read assignments ahead of class and be prepared to participate in class discussions. Come prepared for short quizzes and turn in one minute essays.

**Term Paper:** You are required to write a final term-paper. The theme is “Designing Your Process of Becoming a World-Class Engineering Student.” The suggested length of the paper is 1000 words.

**Final Exam:** The final exam will be comprehensive. Journals must be turned in no later than the time of the scheduled final exam.

**Scholastic Integrity/Academic Honesty** - In accordance with University regulations, scholastic dishonesty on a given assignment will be referred to the Dean of Students and may result in a zero on the assignment, an "F" in the course, or even suspension from the university. If you need assistance with your assignments, please consult authorized sources of help. “Plagiarism” is the unattributed use of someone else's work -- a classmate's, a website's, even a teacher's from another course. For more information on Scholastic Dishonesty and/or Plagiarism, consult the Handbook of Operating Procedures: Student Affairs, which is available in the Office of Student Life.

**Classroom Etiquette:** Part of being a professional is being on time and being prepared to do your job. This applies to your career as a student as much as it does to your future career as an engineer. Coming to class late is unprofessional and is very disruptive to the class. You are expected to be in the class and prepared to participate at the scheduled start time. If you are late to class, you are to come in quietly and take your seat. **DO NOT** attempt to turn in assignments or pick up handouts until class is over.
Wireless devices are allowed in the classroom. However, please use professional discretion with wireless devices, shutting them off, or setting them to mute or silent mode before coming to class. Do not answer incoming calls or make outgoing calls except in an emergency. Do not use text messaging or web browser features while in class. If you must answer the phone, leave the class discretely. You may return to the class once your call is finished.

The Center for Accommodations and Support Services (CASS): Students with special needs that are registered with CASS are to contact me immediately so that we can work out accommodations for your needs. CASS may be contacted at 747-5148, cass@utep.edu or go to Room 106 Union East Building.

Final Exam Policy: Exemption from final examination may not be given. Final examinations are scheduled to be two hours, forty-five minutes in length and take place during the final examination period. It is the policy of the university not to administer a second final examination in the course. It is also university policy that students shall not have more than two final examinations in a single day. In the unlikely event that the examination schedule results in a student having three final examinations on a single day, the faculty member upon the request of the student shall reschedule the second of that student’s three examinations.

Team-Based Learning: This course will employ a paradigm called Team-Based Learning in order to increase the students’ preparedness for class, to strengthen their bonds with fellow EE majors, and to help insure their ability to excel in the course. The following helps to explain the rationale and mechanics of Team-Based Learning.

1) Participation in student learning teams: The first week of class, all students will be assigned to learning teams. These teams will be used throughout the course to enhance your learning. Student teams will complete a number of activities designed to help students learn course material and develop their critical thinking skills. Individual and team performance will be components of one’s final course grade.

2) Class attendance and participation: You will be participating in a number of class activities that will enrich your thinking about topics in the course. Most of these activities cannot be “made up” in the event of absence. Consequently, attendance in class is REQUIRED. Student teams will take attendance every day. Students who anticipate missing class, arriving late, or leaving early frequently should consider dropping the class.

3) You are expected to read, work problems, and reflect on the assigned materials prior to the next class. You should compile a list of at least three questions that you will bring to class each period. The instructor will call upon class members for their questions.

4) Class activities: During class activities, students are expected to participate and to
treat other participants with respect. Please remember that other students may have different opinions and experiences than you. Give others and their ideas the same attention and respect you expect to receive.

5) **Readiness Assessment Tests (RATs):** On certain days, the instructor will begin the period with a short Readiness Assessment Test (RAT) that measures one's comprehension of the course material. RATs typically consist of 5 multiple choice questions. First, students will complete the RAT **individually.** Students should mark their individual answers on BOTH their Scantron sheets and their copy of the RAT so they will have a record of their individual answers after turning in their Scantron. After all the individual RAT Scantron sheets have been collected, **learning teams will complete the same RAT.** All members of a team will receive the same score on the **Team RAT.** Students who miss a RAT will receive zeros on both the individual and team portion of the RAT. Students who must miss class due to university activities can take the missed RAT prior to class. **MAKE-UP RATS WILL NOT BE GIVEN FOR ANY REASON.**

6) **Peer Evaluation of Team Members:** At the end of the semester, you will evaluate your teammates. This evaluation will assess your teammates’ objective behaviors (e.g., did they show up for team meetings) and your subjective impressions of their interpersonal skills (e.g., would you be willing to work with this person again). This evaluation is a critical aspect of the team-based learning paradigm because it holds team members accountable to their teammates. Your teammates can become valued friends and a means to success in the course if you give your best contribution to all team activities.

**Important Dates:**

- **Labor Day** – September 1
- **Mid-term grades** - October 27 e-mailed to freshmen via UTEP e-mail address
- **Drop deadline** – October 31
- **Thanksgiving Holidays** – no classes November 27 – 28
- **Dead Day** - December 5
- **Final Grades Available** – December 22