Course:  EE 1202 – Introduction to Electrical Engineering; Fall, 2012  
Class Meeting Room:  ECSS 2.415  
Class Schedule:  Section 001 – M, 11:30-12:45 PM

Instructor:  Dr. Nathan Dodge     Tel:  (972) 883-2951     email:  dodge@utdallas.edu  
Office:  ECSN 4.916     Office Hours:  TR, 4:00-6:00 PM and by appointment  
Instructors Website:  http://www.utd.edu/~dodge/

NOTE:  I DO NOT USE WEBCT OR eLEARNING.  TO GET INFORMATION ABOUT EE 1202  
YOU MUST GO TO THE WEBSITE LISTED ABOVE.

Course Pre-requisite:  None.  Technical information required for lab exercises is included  
in the exercise outline in the lab manual and in the classroom briefings about the lab.

Course Description:  EE 1202 explores what it means to be an electrical engineer.  It also  
introduces students to experimental practices in an electrical circuit laboratory.  In the classroom,  
students will learn some of the practical aspects of electrical engineering and important practices  
and habits for the engineer.  They will also study important lifelong considerations of the engineer,  
including continuing education, contemporary issues, ethics, and the impact on, and due to,  
engineering.  The laboratory portion of the class will introduce students to (1) common laboratory  
instruments (including the power supply, multimeter, oscilloscope, frequency counter, and signal  
generator), (2) performing a laboratory experiment, and (3) basics of electrical circuit theory.  
Students will also learn to work in teams and with a partner, as well as how to communicate  
research results by writing a laboratory report.

Student Learning Objectives/Outcomes:  By the end of EE 1202, the student should have a  
firm basic knowledge of:  
   a. EE lab equipment, procedures, and basic circuit parameters  
   b. How to write a lab report and work with a lab partner  
   c. Ethical considerations in EE 
   d. Contemporary issues and EE 
   e. Communication (personal and professional)  
   f. The importance of lifelong learning  

EE 1202 introduces the discipline of electrical engineering.  It includes a one and ½ hour  
lecture plus a 3 hour fundamentals laboratory that stresses learning about laboratory  
procedures and equipment.  Topics include:  Learning the use of common laboratory  
electronic equipment; understanding the assembly of electronic circuits; and making  
various measurements.  Students also learn how to work together with a partner and how to  
write a laboratory report.  The lecture introduces general engineering practices,  
engineering activities at selected local companies, and concepts of ethical engineering  
behavior.  EE 1202 may be taken by students outside of engineering in order to learn about  
the engineering profession.

Required Materials:  
   1. Electronics parts kits (2) and 9-volt battery (kits and battery should be packaged  
together, also available at UTD bookstore).
## EE 1202 Class Schedule, Spring, 2012

<table>
<thead>
<tr>
<th>Class Number</th>
<th>Class Dates</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>August 27</td>
<td>Introductory meeting – course overview and discussion of syllabus. Briefing on lab procedures and routine. Briefing on Lab #1: Building an Electronic Circuit. Creativity video.</td>
</tr>
<tr>
<td>---</td>
<td>September 3</td>
<td>Labor Day – No class!!!</td>
</tr>
<tr>
<td>2</td>
<td>September 10</td>
<td>Briefing on Lab #2: Introduction to resistor circuits. Lecture: Why EE?/Preparing to be an EE.</td>
</tr>
<tr>
<td>3</td>
<td>September 17</td>
<td>Briefing on Lab #3: Introduction to digital circuits. Conclusion: Why EE? (If necessary.)</td>
</tr>
<tr>
<td>4</td>
<td>September 24</td>
<td>Video on semiconductor mfg. EE professional societies. Professional society student chapters. “Lifelong learning.”</td>
</tr>
<tr>
<td>5</td>
<td>October 1</td>
<td>Briefing on Lab #4: Introduction to transients in DC circuits.</td>
</tr>
<tr>
<td>6</td>
<td>October 8</td>
<td>Briefing on Lab #5: Introduction to AC circuit analysis.</td>
</tr>
<tr>
<td>7</td>
<td>October 15</td>
<td>Briefing on Lab #6. Guest speaker number 1: TBD</td>
</tr>
<tr>
<td>8</td>
<td>October 22</td>
<td>Lecture: Communication, personal and professional.</td>
</tr>
<tr>
<td>9</td>
<td>October 29</td>
<td>Briefing on Lab #7. Introduction to amplifiers.</td>
</tr>
<tr>
<td>10</td>
<td>November 5</td>
<td>Briefing on Lab #8. Engineering Ethics. Case studies. Quick team meetings for ethics pres. Team formation.</td>
</tr>
<tr>
<td>11</td>
<td>November 12</td>
<td>Guest speaker number 2: TBD</td>
</tr>
<tr>
<td>---</td>
<td>November 19</td>
<td>Fall break!!!!</td>
</tr>
<tr>
<td>12</td>
<td>November 26</td>
<td>Technology and society lecture. Assignment for issue report.</td>
</tr>
<tr>
<td>13</td>
<td>December 3</td>
<td>Reserved.</td>
</tr>
<tr>
<td>14</td>
<td>December 10</td>
<td>Project presentations, technology and society.</td>
</tr>
</tbody>
</table>

**NOTE:** Lecture and lab briefing dates are subject to change!!!

### Lab Routine:
1. Read the experiment description BEFORE the lab briefing and become familiar with the procedure before the lab starts. Complete the work sheet AFTER the lab briefing.
2. Completed worksheets and data sheets are turned in with lab report. Worksheets are worth 20 percent of report grade, but it is a completion grade (i.e., you get full value if you complete it, whether any of the answers are wrong).
3. Reserve a lab station in ECSS 4.622 in advance. You will do the lab on your own, but a TA will be there to supervise and offer help (Not the answer!) when requested.
4. When you are finished, clean up your work area, and you may leave. In general, reports are due on the Monday two weeks after the briefing. For lab #8, turn in only the data sheet.
5. All lab reports and chapter outlines will be submitted directly to the TA. See information below in “Homework Submission Procedure.”
6. **NOTE THAT ALL LAB MATERIAL – PROJECT DESCRIPTIONS, REPORT FORMAT, DATA SHEETS, AND PRELIMINARY EXERCISES ("WORKSHEETS") – ARE AVAILABLE ON-LINE AT THE INSTRUCTOR’S WEB SITE.**

### Notes About Homework and Semester Project:
1. Homework will consist of several special assignments based on topics discussed/lectures in class.
2. The final team assignment will be a major presentation, which teams will do during the final class period.
Grading Policy:

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab reports/results:*</td>
<td>50%</td>
</tr>
<tr>
<td>Special assignments:**</td>
<td>25%</td>
</tr>
<tr>
<td>Final presentation and report:**</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

* The lab grade is apportioned as follows: Worksheets – 20% of lab grade, correctness and detail of experimental work and answers to questions – 50% of lab grade, neatness and organization of report – 30% of lab grade.

Grade ranges for EE 1202 are: A+: 97-100; A: 93-96; A−: 90-92; B+: 87-89; B: 83-86; B−: 80-82; C+: 77-79; C: 73-76; C−: 70-72; D+: 67-69; D: 63-66; D−: 60-62; F: below 60.

Course & Instructor Policies:

Students will work in two-person teams in labs and for the homework assignments. Please arrange your team partnerships as soon after class #1 as possible. If you do not have a lab partner, tell the instructor at the beginning of the second class.

Most lab exercises will be completed in about 2 hours, although some sessions may take more. Lab reports are due on Monday, two weeks after the briefing. Students will alternate composing reports with partner for Labs 1-7. There is no report for Lab #8; simply submit your data sheet to the class TA. Your grade on Lab #8 depends solely on the correctness of the data and your solutions to the two problems. NOTE: AS PARTNERS WILL BOTH BE GIVEN CREDIT (A GRADE) FOR EACH LAB REPORT, PLEASE BE SURE TO INCLUDE YOUR PARTNER’S NAME ON EACH REPORT YOU SUBMIT! OTHERWISE, YOUR PARTNER WILL NOT RECEIVE CREDIT FOR THAT REPORT!

Exams: There are no exams in EE 1202.

Homework:

Lab reports are due per the “EE 1202 Lab Report Due Dates” schedule. Late lab reports are NOT accepted, except under extraordinary circumstances. Lab grades will be returned one to two weeks after lab reports are turned in.

Homework due dates and the method of submission will be established based on the assigned date later in the semester.

Homework submission procedure:

Lab reports are due in class on the lab report due date. The exact lab report submission schedule and time will be shown on the web site, along with the TA’s office location.

Class attendance:

Class attendance is only occasionally taken. However, points can be deducted for habitual tardiness by your (irritated) instructor.

Lab citizenship, etc.:

Proper lab deportment for engineering students is taken for granted. When you enter class, speak quietly if you are carrying on a conversation. MAKE SURE YOU TURN OFF YOUR CELL PHONE. Do not listen to mp3 players, iPods, etc., in class. Do NOT use your computer in class, or you will be criticized, ridiculed, and possible have points taken off their next report or homework grade!
Field Trip Policies and Off-campus Instruction and Course Activities: No off-campus activities in this course.

Student Conduct & Discipline:
The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, A to Z Guide, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the Rules and Regulations, Board of Regents, The University of Texas System, Part 1, Chapter VI, Section 3, and in Title V, Rules on Student Services and Activities of the university’s Handbook of Operating Procedures. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents’ Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

Academic Integrity:
The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one’s own work or material that is not one’s own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university’s policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.
Email Use:
The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student’s U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

Withdrawal from Class:
The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

Student Grievance Procedures:
Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university’s Handbook of Operating Procedures.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called “the respondent”). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent’s School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean’s decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the deal will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

Incomplete Grade Policy:
As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester’s end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of F.

Disability Services:
The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is:
The University of Texas at Dallas, SU 22
PO Box 830688
Richardson, Texas 75083-0688
(972) 883-2098 (voice or TTY)
Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student’s responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

**Religious Holy Days:**

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

*These descriptions and timelines are subject to change at the discretion of the instructor.*