Syllabus
EE 1000
Introduction to Electronics Engineering

Description: An introductory course to Electronics Engineering topics including electronic terms, numbering systems, analog circuits, digital circuits and documentation practices.

Instructor: Dr. Fon Brown, 626-7781 (Office), Building 4, Room 421E
Office Hours (Ogden, Room 421E) TR 11:30-12:30 PM, MW 4:00-5:00PM.
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Prerequisite: None.

Text: None, Handouts will be given in class as needed.

Student Learning Outcomes: By the end of the semester, the student will be able to

1. Demonstrate an understanding of basic electronics terms.
2. Build and Analyze simple electronic circuits.
3. Draw Schematic Diagrams.
4. Use scientific notation.
5. Use the binary numbering system.
6. Describe how Electronics Engineers fit into today's work force.

Homework: Homework will be assigned on most lecture days. Homework is due at the beginning of class one class period after it is assigned. Worksheets are to be turned in unfolded. Additional pages may be attached to show work if (a) they are on engineering paper and (b) they are stapled to the worksheet. Non-worksheet homework must be clear and well organized on engineering paper and conform to the guidelines attached to this syllabus. Use only one side of each sheet and submit folded lengthwise, with your name, the class (EE 1000) and the assignment number written on the outside. Do not use multiple columns; separate problems with horizontal bars and box each answer. Homework that does not conform to this format will be penalized. Working on homework in small groups (three or less) is acceptable, but you must actively participate. Do not just wait for the group to find the answer then copy it. (That would be cheating.)

Quizzes: Quizzes may be given, unannounced, usually when attendance is inexplicably low. Quizzes count as 5 homework points.

Exams: There will be no exams in this class, only projects, homework and quizzes.

Projects: There will be 4 projects assigned during the semester which are to be accomplished in teams of 3 or less. Teams may be reorganized after each project either voluntarily or if deemed necessary by the instructor. We will hold class in the lab 2-4 days for each project. If additional time is needed, you will need to work at home or at the open lab (Room 416, Building 4) on the Ogden campus.

The projects tentatively planned for this course are:

1. Crystal Radio (make an AM radio out of a diode and household items.)
2. Theremin (makes eerie music using the properties of photo-resistors)
3. Electric Die (randomly lights 1-6 die pips when a button is pressed.)
4. A Simple Digital Volt Meter (measures 0-4 Volts to the nearest volt.)

All team members receive the same grade for their project.

There is a 20% penalty if a project is late, a 40% penalty if a project almost works, and a 60% penalty for both. If a project is passed off as an almost working on the due date, it can be passed off as a (late) fully working project at a later date. No project may be passed off after the time scheduled for the final exam.

For projects 1, 2 and 4, the team must also submit a schematic diagram drawn according to the guidelines given in class. Sloppy or unprofessional schematics will not be accepted or will be penalized.

Grading: Grades are based on the weighted average of the projects, homework and quiz scores as shown below. Scores may be normalized (at the instructor's discretion) to raise (but not lower) the average grade in the class.

Homework & Quizzes...... 30%
Projects 70%

Letter grades are assigned according to the scale below. Borderline cases may be promoted (again, at the instructor's discretion).

A   93% or more
A-   90% - 92.99%
B+   87% - 89.99%
B   83% - 86.99%
B-   80% - 82.99%
C+   77% - 79.99%
C   73% - 76.99%
C-   70% - 72.99%
D   60% - 69.99%
F   below 60%

Services for Students with Disabilities: Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in Room 181 of the Student Services Center. SSD can also arrange to provide course materials (including the syllabus) in alternative formats if necessary.

Homework Guidelines

	Month / Day / Year	Course Number	Name (Last, First)	1⁄2

1.1 a

Complete Problem Definition. Including figures, graphs, schematics, etc. May be copied directly from the assignment.

Leave some space between definition and solution

Show Problem Solution.

SHOW ALL WORK

Box Final Answer and Units

Separate parts with one line

1.1 b

Separate problems with a double line.

1.2

Repeat the above format for all remaining problems.

NOTES:

1. Use only one side of engineering paper [E-2].
2. Number all pages (page # / of #).
3. You can work more then one problem per page if space is
4. available.
   Use PENCIL and eraser.
5. PRINT, no script. All printing must be neat and horizontal.
6. Each problem definition should have all pertinent
7. information required to understand the problem without referring to the textbook.
   Organize your solution so that it can be easily followed.
8.