

EE 3338 ELECTRONICS I
Spring 2023

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Course Days/Time: TTh 3 – 4:20 PM EDU 313

COVID Precautions: I highly encourage you to be both vaccinated and to wear a mask whether you are vaccinated or not, when appropriate. **I am vaccinated**, but I will still be wearing a mask at UTEP based on conditions at the time. I routinely do not wear a mask at present because I feel that after being vaccinated, and contracting COVID anyway, that I am safe enough. But COVID is tenacious, and with new variants, even vaccinated people like me are getting sick. Via empirical evidence, and some scientific, both the vaccines and masks help a lot. So please wear a mask in class to protect your classmates and professors, when appropriate. Most of your professors are old enough that a COVID infection could be very bad news. Another consideration, particularly for this class, is that I am the only one that can teach this class, and if I get sick, it will be quite hard to finish the class. Like in other areas in ECE, there are no easy substitute professors. So protect me, and the rest of the ECE professors, so that we can teach the full semester.

Office Hours: My office is not setup well to have face-to-face office hours. I will try the following. You can come by my office and call (747-6972) and we can arrange something. If we need to meet, my plan is to exit my office and we can meet in the big open area outside my office or perhaps a conference/class room. I will be most available M 1-4 and Th 12-2.

Course Description: Continuation of Electrical Circuits II (EE2351) and introduction to electronic devices. Material covered includes: Diode, Op Amp, and Field Effect Transistor circuits.

Prerequisite: C or better grade in EE 2351 and EE2151

Textbook: Microelectronic Circuits 8th ed., by Adel Sedra and Kenneth Smith.

Course Outcomes:

- 1) Students will understand the design aspects of and be capable of analyzing circuits containing Diodes, Op Amps, and Field Effect Transistors.
- 2) Demonstrate competence in written technical communication, via the lab.

Course Format: The course will utilize a modular, student-centered, problem-based approach. Modular means that the course will be divided into 4 sections: Review, Op-Amps, Diodes, and Transistors. **Student-centered means that students will be expected to utilize self-study material that will be provided to prepare for class. Class time will be significantly devoted to problem**

discussion.

Course modules will be started with a question like “What needs to be known to design a power supply?”. Students will answer these questions via guided group exploration. Resources for answering the questions will include self-study materials, the textbook, internet, professor, etc. After some initial exploration, students may be given a pre-quiz to assist in understanding the information that is required. **Any pre-quizzes will not be graded. After this startup exercise, lecture material will be discussed** to address needed information. As material is presented other opportunities may be provided to ascertain missing information and presentation topics may be altered/added.

Absence Policy: Make-up work is in general not possible and effort should be made to attend/view every lecture. The **professor should be informed of any problems with attendance at least a week prior to any absence** to allow for rescheduling of work for the entire class. **In the event that an emergency or sudden sickness occurs, inform the professor as soon as possible.** In such cases an oral quiz/exam may be required to make-up a quiz/exam. A physician's note, or a similar, may be required prior to such a make-up.

Undergraduate Grading: Based on equally-weighted quizzes and one test, the exam will be weighted at 30% and quizzes as a group at 70% of final grade. A normalized 4 to 0 grading scale will be used where each score means:

**4: concepts are understood,
3: concepts are mostly understood,
2: concepts are halfway understood,
1: concepts are mostly not understood, and
0: concepts are not understood.**

Scores between two of the above are to be expected. In general, an average performance of 3.5 to 4 will earn an A, 3 to 3.5 a B and so on. Class participation may be taken into account and could have a positive effect on your final grade. Seldomly grade boundaries are shifted. Any questions concerning a test/quiz score must be brought up within 2 days after the test/quiz is returned. Any graded material not picked up within a week of the end of the term, will be shredded. Any questions concerning final grades should be brought up within one week of grades being posted to Goldmine.

Copyright statement for course materials: All materials used in this course (including but not limited to recordings, assignments, notes, handouts, quizzes, exams, etc.) are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. You may not further disseminate (i.e., share, send or post) any class materials/resources outside of this course. Doing so may result in disciplinary action.

Accommodation under the ADA:

If you feel you may have a disability that requires accommodation, contact the Center for Accommodations and Support Services at 747-5148, go to room 106E Union, or e-mail cass@utep.edu.

Academic Dishonesty: “Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Proven violations of the detailed regulations, as printed in the *Handbook of Operating Procedures*, and available in the Office of the Dean of Students and the homepage of the Dean of Students at www.utep.edu, may result in sanctions ranging from disciplinary probation, to a failing grade in the work in question, to a failing grade in the course, to suspension or dismissal, among others.” (Quote from the Undergraduate and Graduate Catalog)

Exam/Quiz Etiquette

Unless an exception has been approved by the instructor in advance, the following will be enforced during exams/quizzes:

- 1) No caps, hats, or similar can be worn during quizzes/exams.
- 2) Ears must be visible. Generally, no device can be plugged into or on ears.
- 3) Only standard, basic prescription eyeglasses can be worn. No sunglasses.
- 4) Only T-shirts and other standard, simple shirts, and jeans and other simple pants or shorts are allowed. Simple blouses as well as dresses and skirts can be worn. No cargo pants/shorts. No coats, hoodies, or similar can be worn. No heavy clothing layering is permitted, but a simple cardigan-type sweater may be worn with approval.
- 5) No book bag may be permitted at the desk during exam/quiz.
- 6) All quizzes/exams are closed book and closed notes.
- 7) No watches, calculators, cell phones, tablets, laptops or other electronics allowed at desk during quiz/exam.
- 8) Medical equipment may be allowed with instructor permission.
- 9) Only pencils and an eraser are allowed. Pencils must be standard, hand-sharpened types (Bring several to quiz/exam.). Only small erasers (3” x 1” maximum size) are allowed. No pens or mechanical pencils.
- 10) Water bottles and other drinks are not allowed without instructor permission.
- 11) Bathroom breaks are not allowed. If you need to go to the bathroom during exam, you must turn in your exam. A return to continue the test is not allowed. Go to bathroom before test.