

Syllabus

Welcome to Electrical & Computer Engineering II. I look forward to working with you over the next 15 weeks. My goals for this class are to: 1) help you feel confident that you have selected a major you will enjoy pursuing and 2) prepare you for success in your upper level engineering courses and your career as an engineer by building on your EE/CE 1100 foundation. When you have questions about the material we are covering, please come talk to me right away so you do not fall behind. I am here to help you succeed! I also encourage you to attend weekly SI sessions as they will help you master the exciting but challenging ideas we will be studying.

By the end of this course you should:

- ✓ Understand basic concepts that will prepare you for success in your Fundamentals Labs, CE/EE 3301, CE/EE 3302, CE/EE 3201 and courses that require a background in embedded systems such as Senior Design.
- ✓ Have acquired laboratory experience that deepened your understanding of concepts covered in lectures.
- ✓ Have developed essential engineering "soft" skills of technical writing, networking and career planning.

• Prerequisites:

None, although prior completion of CE/EE 1100 or an equivalent course is strongly recommended.

• Instructor: Diana Cogan

- Email: diana.cogan@utdallas.edu Course Website: <http://elearning.utdallas.edu/>
- Office hours: Mon. & Wednesday 2:00 – 4:00 pm OR by appointment.

• Teaching Assistants: listed on lab syllabus

• Time and Meeting Locations:

- Section 001: Friday 4:00 pm - 5:15 pm in ECSW 1.365*.
- Section 002: Friday 11:30 am - 12:45 pm in ECSS 2.203*.
- Section 003: Friday 2:30 pm - 3:45 pm ECSS 2.201*.
- Section 004: Friday 10:00 am - 11:15 am in HH 2.502*.
- * If you are ill, you may join your lecture virtually on BlackBoard Collaborate.
- Weekly quizzes are in the *Weekly Quizzes* folder of your eLearning Lecture section. They will be open for 24 hours beginning at the end of your lecture time.
- Lab sections: Tue./Thurs. in SPN 1.115 – check your schedule for your time slot.
- SI (Supplemental Instruction) sessions: These sessions are voluntary but are HIGHLY recommended. Your SI leader will help you master the challenging concepts we will be covering in the class. Sessions will be held weekly on Tuesday, 5:30 – 6:45 pm and Thursday, 4:00 – 5:15 pm. Sessions will be held on BlackBoard Collaborate (SI, not your lecture section) during Weeks 2 & 3.

• Required Materials:

- The course will use McGraw Hill Connect for homework assignments and tests. An online version of the text will be included with Connect. Purchase of a hardcopy is optional (not recommended) but purchase of Connect is required. Sign up for Connect per directions in the welcome email and announcement.
- Personal computer (NOT a tablet, iPad or phone); minimum operating system: Windows 10, MacOSX 10.13+ or Chrome OS. Webcam & audio capability and a reliable internet connection. If you need assistance acquiring this equipment, please go to OIT Tech Support: <https://www.utdallas.edu/oit/helpdesk/>.

• Course Evaluation:

- Exams (3): 10% each
- Lab: 30%
- Professional Development: 20%
- Homework problem sets: 12%
- In-class quizzes 8%

Grading scale:

$90 \leq A- < 93$	$93 \leq A < 97$	$97 \leq A+ \leq 100$
$80 \leq B- < 83$	$83 \leq B < 87$	$87 \leq B+ < 90$
$70 \leq C- < 73$	$73 \leq C < 77$	$77 \leq C+ < 80$
$60 \leq D- < 63$	$63 \leq D < 67$	$67 \leq D+ < 70$
$0 \leq F < 60$		

Notes: 1. Lab participation is mandatory. If you do not complete

at least 9 out of the 12 lab assignments, you will receive a failing grade in this course. **2. Tests will be available on Connect through the Testing Center at the times specified on this syllabus.** You *MUST* make your reservation AT LEAST 3 days in advance of each test. Failure to make or keep an appointment will result in a test score of 0 with no make-up provided. **3. If classes are moved to an on-line format, grading will be substantially revamped** (e.g. test values will be greatly increased to make-up for lack of access to the lab).

Important Class Dates:

- *First Lecture:* January 21
- *Spring Intern Fair:* Friday, January 21 and *ECS Career Fair:* Friday, January 28 – both virtual via Handshake; go to: <https://utdallas.joinhandshake.com/login> to create your Handshake account.
- *Test 1:* review in class, February 18. Test @ Testing Center, Feb. 21 & 22 (Monday & Tuesday).
- *Test 2:* review in class, April 1; Test @ Testing Center, April 4 & 5 (Monday & Tuesday).
- *Test 3:* review in class, April 29; Test @ Testing Center, May 2 – 4 (Monday – Wednesday).
- *Last Day of Class:* Lab meetings, May 3 & 5 – Oral Reports (No lecture this week!)

• How to Succeed in this Class:

- **Attend lectures;** take notes; take weekly quizzes; practice **recalling** the material we cover - frequently. Read the study tips provided by last semester's A students & follow their advice.
- Attend all lab sessions and start homework assignments early so you can ask me for assistance during office hours. Work practice problems and rework homework problems several times. Work with friends so you can practice their problems too.
- Attend SI (Supplemental Instruction) sessions regularly! Your leader will help you master the more difficult concepts we will be covering this semester.
- See or email me when you have questions about lecture or homework. (*PLEASE include your lecture AND lab section numbers in the subject line. Email from your UTD address.*) If you have questions about lab or a lab score, see or email one of the TAs first.

• Course Policies:

- Assignments are to be submitted according to instructions on page 2 of the Lab Syllabus.
- I will allow makeup exams only for university sanctioned activities and extraordinary circumstances, such as a death in your family. You must provide documentation to verify all such activities and circumstances. There are no make-ups for homework/quizzes, but an assignment may be excused if your circumstances warrant.
- You may dispute any graded work within one week of the return of that work.
- Copying on examinations is cheating and is prohibited. Any instances of cheating or plagiarism will be subject to disciplinary penalties according to the UT Dallas policy on scholastic dishonesty. The penalties include the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students and the integrity of the University, I will strictly enforce the policies on scholastic dishonesty. Read the policy at <http://www.utdallas.edu/deanofstudents/dishonesty/>.
- I will post announcements, lecture slides, homework assignments, lab assignments and complementary materials on eLearning. Check regularly – both your lecture and lab sections – so you do not miss anything!

• Class Plan:

Week		Lecture Topic(s)	Laboratory topic
#	Dates	Friday	Tuesday or Thursday
1	1/18-21	Introduction to CE/EE 1202, KVL & KCL	Workshop to review 1100 material & work with equipment
2	1/24-28	Fundamental Laws of Electric Circuits	Lab 1: Introduction to KVL & KCL
3	1/31-2/04	Sinusoids and Phasors	Lab 2: Equivalent resistance & voltage division
4	2/07-11	Capacitors and Inductors	Lab 3: Complex Impedance
5	2/14-18	Review for Test 1	Lab 4a: Introduction to Matlab, Week 1
6	2/21-25	Test 1 on Connect, M/T; Introduction to Op Amps	Lab 4b: Introduction to Matlab, Week 2
7	2/28-3/04	Gain Eqn. Derivation & Intro. to Filters	Lab 5a: Signal Processing with Op Amps (Summing Amp.)
8	3/07-11	Filters, con't. & A Look Inside an Op Amp	Lab 5b: Signal Processing with Op Amps (High Pass Filter)
	3/14-18	Spring Break (all week – no class meetings)	
9	3/21-25	Introduction to Microcontrollers	Lab Make-ups
10	3/28-4/01	Review for Test 2	Lab 6: Introduction to Microcontrollers
11	4/04-08	Test 2 on Connect, M/T; Analog to Digital Conversion	Lab 7: Electronic Dice Roller
12	4/11-15	Analog Communication Systems	Lab 8: Analog to Digital Conversion
13	4/18-22	Digital Communication Systems	Lab 9a: Transmitting and Receiving Messages, Wk 1
14	4/25-29	Preparing & Giving an Oral Presentation Review for Test 3	Lab 9b: Transmitting and Receiving Messages, Wk 2
15	5/02-05	Test 3 on Connect M-W; no lecture.	Professional Development 4: Oral Report (Lab 10)

These descriptions and timelines are subject to change at my discretion (i.e. if necessary).

All due dates are listed in the Summary of When and Where Assignments are Due (on page 2 of the Lab Syllabus).

- **Steps for turning in assignments on eLearning:**

1. Install a scanning app on your phone and use it to convert your assignment to a pdf.
2. Do not use Safari (browser) to submit your Turnitin assignment. Firefox or Chrome are recommended.
3. Submitting your assignment is a two-step process:
 - a. Upload your file.
 - b. Review the preview image of your document to make sure it is correct. If it is not, resubmit it.
 - c. Click the *Confirm* button. If you do not click *Confirm*, your assignment will not be submitted.
4. Make sure you get the email confirmation. If you do not receive an email confirmation, your assignment WAS NOT submitted successfully. Try again, making sure you are following steps 2 and 3 properly.
5. For additional assistance, contact elarning@utdallas.edu.

Class Materials

The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Classroom Conduct Requirements Related to Public Health Measures

UT Dallas will follow the public health and safety guidelines put forth by the Centers for Disease Control and Prevention (CDC), the Texas Department of State Health Services (DSHS), and local public health agencies that are in effect at that time during the Fall 2021 semester to the extent allowed by state governance. Texas Governor Greg Abbott's Executive Order [GA-38](#) prohibits us from mandating vaccines and face coverings for UT Dallas employees, students, and members of the public on campus. However, we strongly encourage all Comets to get vaccinated and wear face coverings as recommended by the CDC. Check the [Comets United: Latest Updates webpage](#) for the latest guidance on the University's public health measures. Comets are expected to carry out [Student Safety](#) protocols in adherence to the Comet Commitment. Unvaccinated Comets will be expected to complete the [Required Daily Health Screening](#). Those students who do not comply will be referred to the Office of Community Standards and Conduct for disciplinary action under the [Student Code of Conduct – UTSP5003](#).

Class Attendance

The University's attendance policy requirement is that individual faculty set their course attendance requirements. Regular and punctual class attendance is expected. Students who fail to attend class regularly are inviting scholastic difficulty. In some courses, instructors may have special attendance requirements; these should be made known to students during the first week of classes. Faculty have the discretion to set an attendance policy for their in-person meetings, but the absences due to COVID-19 cannot be counted against a quarantined student.

Class Participation

Regular class participation is expected. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Class Recordings

The instructor plans to record meetings of this course. These recordings will be made available to all students registered for this class if the intent is to supplement the classroom experience. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

“As a Comet, I pledge honesty, integrity, and service in all that I do.”

Academic Support Resources

The information contained in the following link lists the University’s academic support resources for all students.

Please see <http://go.utdallas.edu/academic-support-resources>.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University’s policies and procedures segment of the course syllabus. Please review the catalog sections regarding the [credit/no credit](#) or [pass/fail](#) grading option and withdrawal from class.

Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.