EENG 1910 Project I – Introduction to Electrical Engineering

Spring 2026
Thursdays, 5:30 – 8:20 PM
Classroom: DP B227

Instructor: Dr. Eric Ayeh
Office: NA
E-mail: eric.ayeh@unt.edu
Office Hours: Tuesdays from 5:30 to 8:30 PM or by appointment*
Teaching Assistant: Sruthi Ilapuram
Office Hours: Wednesdays from 2PM to 4PM
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Labs: B207 & B288

Course Description

This course is designed to provide students with the foundation necessary for the successful completion of the electrical engineering program. It discusses the program and introduces basic electrical and electronic concepts. It introduces the use of basic lab equipment and standard software. The engineering design process which embodies the steps required to take an idea from concept to successful design is also introduced along with ethical and contemporary issues.

Course Structure and Materials

The course will be offered in-person between Jan 12th and May 8th. Remote lectures may become necessary in cases of unforeseen circumstances, such as inclement weather and other unexpected situations. To participate in remote lectures, **you will need access to a webcam, a speaker, a microphone, and a quiet environment**. All materials (announcements, lectures, assignments, grades, etc.) for this course will be posted on Canvas https://unt.instructure.com/courses/138318.

Textbooks

No required textbooks.
Reference Books:
"Studying Engineering" by Raymond Landis Discover Press.
Electrical Engineering: Principles and Applications" by Allan R. Hambley

Grading Policy

Assignments: 30%
Presentations/Reports: 30%
In Class Questions/Quizzes: 25%
Final Examination: 15%
Final grade scale: A = 90-100, B = 80-89, C = 70-79, D = 60-69, F = 50-59

General Policies

- Class attendance is **mandatory** whether we are meeting virtually or in-person.
- Lecture materials, assignments, and announcements about the course **will be posted on Canvas**. **It is your responsibility to ALWAYS check Canvas!**
- Assignments **are due at the beginning of the class on the due date**.
- Late assignments are accepted with **a penalty of 10% for each day late**.
- Labs should ideally be completed by the end of class on the day of the lab. **However, in the event you are unable to complete a lab, you will have until the last lab session of the semester to complete it or show proof of completion for full credit.**
- Assignments are **to be turned in on Canvas and must be typed – no handwritten work will be accepted**.
- Assignments are **individual work** unless otherwise stated. Everyone must turn in **his/her own individual work**. **Simply copying others' work will be treated as a violation of academic honesty**.
- While the use of **language models such as ChatGPT is permissible for educational purposes**, it is important to note that they should not be utilized to directly respond to assignment questions.
- **Tardiness**: If you arrive late, please enter quietly, and sit down.
- **Cell phones**: Please remember to turn off phones prior to class or put them in silent mode (they are to be used for emergency purposes only).
- Students are strongly encouraged to get to know each other in the class.
- During virtual meetings which will be through Zoom and **previously announced**,
  - Stage your video area before using a camera – keep in mind that people aren't just seeing you.
  - Make sure your camera is in a stable position and that you are dressed appropriately.
  - Mute your microphone to help keep background noise to a minimum.
  - Limit distractions and avoid multi-tasking.
- **It is the responsibility of students with disabilities to provide the instructor with appropriate documentation so that a learning environment that provides reasonable accommodation for their disabilities is guaranteed**. If you believe you have a disability requiring accommodation, please see the instructor and/or contact the Office of Disability Accommodation at 940-565-4323 during the first week of class. (https://disability.unt.edu/).
- Carrying Concealed Handguns on Campus: visit https://campuscarry.unt.edu/ for the University policies and your rights.
- Important dates and deadlines for the semester are available at https://registrar.unt.edu/registration/spring-academic-calendar.html

SPOT Evaluation

The Student Perceptions of Teaching (SPOT) evaluation is a requirement for all organized classes at UNT. This short survey will be made available to you near the end of the semester. Please make sure to take this opportunity to comment on how this class is taught. **Extra credit will be given to students who take the survey and provide proof of completion.**
An announcement will be made in class when the survey becomes available, which should be from **April 14th** to **April 30th**.

Attendance

While attendance is expected as outlined above, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns of contagious diseases. If you find yourself unable to attend class due to illness or any other reasons, kindly reach out to both the TA and me. **It is important that you communicate with us prior to being absent so that we can accommodate your request.**

Extra Help

PLEASE DO NOT WAIT UNTIL THE LAST MINUTE!!!
If you are having trouble with this course, please contact me or the teaching assistant so that we can find a solution together to whatever problem you may be having.

"The road to success is one that you do not have to travel alone."

Course Outline*

The dates and topics in the table below are tentative and subject to change.

Week	Date	Topic	Assignment
1	15-Jan	Course Introduction, Discussion on UNT EE Curriculum, Basic Electronics	Assignment 1 – Career Goal, Basic Electronics
2	22-Jan	Lab Safety, Engineering Design – Introduction, Introduction to Simple Circuit Building, Introduction to Lab Kit	Assignment 2 – Degree Audit, Engineering Design
3	29-Jan	**(Select Project Teams)** Team and Teamwork, Engineering Design – Functional Decomposition, Introduction to Lab Equipment, **Lab-1**	Assignment 3 – Lab Report, Lab Equipment
4	05-Feb	Engineering Design – Behavioral Models, Introduction to Circuit Soldering, **Introduction to Mini-Project,** **Soldering Lab**	Mini-Project Presentation & Report
5	12-Feb	Technical Report Writing, Effective Oral Communications, Ohm's Law, Equivalent Resistance, Introduction to Multisim	Assignment 4
6	19-Feb	Engineering Design – Project Management, Engineering Design – Project Selection, **Lab-2**	Assignment 5 – Lab Report
7	26-Feb	Logic Gates, Introduction to DSCH, **Introduction to Final Project**, **Lab-3**	Assignment 6 – Multisim/DSCH **Final Project Proposal**
8	**05-Mar**	**Mini-Project - Presentations**	
9	**12-Mar**	**SPRING BREAK (No Class)**	
10	19-Mar	Introduction to MATLAB	Assignment 7 – MATLAB
11	26-Mar	Introduction to MATLAB	Assignment 8 – MATLAB
12	02-Apr	Engineering Design – Design & Testing, Introduction to MATLAB	Assignment 9 – MATLAB
13	09-Apr	Introduction to Sound and Image Processing in MATLAB, Globalization & Contemporary Issues, IEEE Standards, Professionalism & Ethics	Assignment 10
14	16-Apr		
15	**23-Apr**	**Final Project Presentations**	
16	**30-Apr**	**Final Exam**	
17	**07-May**		
END OF SEMESTER			