ETC/CET 101 Lab, Introduction to Electrical Engineering

Instructors: Chester Wright, David Bone

Credit Hours: 1.5

Campus Based Course Fall 2025

Office Hours and Contact Information:

Office Location: Kunsela Hall A133 Office Hours: Coordinate with instructors

Email: wrightc@sunypoly.edu, boned@sunypoly.edu

Introduction:

Electrical and Computer engineering is a broad discipline and it leverages many different technologies. In this lab course, a variety of introductory electrical engineering topics will be covered. An emphasis on electrical laboratory safety will be the priority topic due to the hazards present. Basic circuits will be introduced and students will design, construct, simulate, and analyze the circuitry. Introduction of MATLAB and Linux as vital tools in the field of engineering.

Course Objectives:

- Understand electrical hazards and practice laboratory safety
- Design and construct basic circuits
- Simulate and analyze basic circuits
- Program Arduino micro-controllers
- Script and execute MATLAB simulations
- Operate the Linux operating system

Course Schedule:

Dates are tentative and subject-to-change dependent on course pace.

Week	Lab Activity	Lab Report Due Dates
1	Intro to the Electrical Lab	
2	Intro to the Electrical Lab	Intro to the Electrical Lab (due 9/19)
3	Circuit Board Assembly	Circuit Board Assembly (due 9/26)
4	Circuit Analysis	
5	Circuit Analysis	Circuit Analysis (due 10/10)
6	Circuit Simulation	
7	Circuit Simulation	Circuit Simulation (due 10/24)
8	MATLAB	
9	MATLAB	MATLAB (due 11/7)
10	Arduino	
11	Arduino	Arduino (due 11/21)
12	Linux	
13	Linux	
14	Linux	Linux (due 12/5)

Method of Evaluation:

The final lab grade will be evaluated by the average grade of all lab reports covered.

Lab Activities	Grade Percentage
Lab reports	100%

Policy on Submission of Assignments:

- Lab reports must be turned in via brightspace before the posted due date
- Late submissions will be subject to a 50% point reduction

Important Notice – Please note that all core courses in the (name of program, department, or major> require a "C" or better to meet requirements.

Student Learning Outcomes: By the end of the semester, You will

- understand electrical lab hazards and best safety practices,
- identify common electrical components,
- construct basic breadboard circuits,
- identify and utilize circuit analysis tools

Code of Conduct: Students are referred to the Student Handbook for SUNY Poly's current Academic Integrity Policy regarding plagiarism and other inappropriate academic activities.

Policy on Missed Classes & Ior Make-up Work, Extra Credit:

Students should email both instructors if they cannot attend class for any valid reason: medical/family-related emergencies. All missed worksheets/quizzes must be completed within a reasonable timeframe determined by coordinating with the instructors.

Cancellation of Classes Due to Inclement Weather or Other Emergency:

SUNY Poly has a 24-hour hotline to inform students, faculty and staff when severe winter weather prompts the cancellation of all classes. On-campus, you can call the "Snowline" by dialing ext. 7669 ("SNOW"). Off-campus, Snowline can be reached by calling 315-792-7385. Snowline cards are available at various locations on campus.

In the event of severe weather, Snowline will announce only the cancellation of ALL classes. The cancellation of all classes will also be posted online, at sunypoly.edu, and will be broadcast on radio and television stations in the Utica-Rome, Syracuse, and Albany areas. Individual class cancellations are always available at sunypoly.edu/apps/canceled_classes.

Accommodations for Students with Disabilities:

Your access in this course is important to me. In compliance with the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973, SUNY Polytechnic Institute is committed to ensuring comprehensive educational access and accommodations for all registered students seeking access to meet course requirements and fully participate in programs and activities. Students with documented disabilities, temporary, or medical conditions are encouraged to request services by contacting Student Accessibility Services (SAS) or filling out the Request for Accommodations form. Please note, requesting accommodations is only the first step. You must provide documentation to SAS and meet with staff before receiving accommodations. Please do this as early as possible 1) because accommodations are never retroactive and 2) so that we have adequate time to arrange your approved academic accommodation/s. Once SAS creates your accommodation plan, it is your responsibility to provide me a copy of the accommodation plan. If you experience any access barriers in this course, such as with printed content, graphics, online materials, etc., reach out to me or Accessibility Services right away. For information related to these services or to schedule an appointment, please contact the SAS using the information provided below.

Office of Student Accessibility Services

SAS@sunypoly.edu (315) 792-7170 Peter J. Cayan Library, L112 Coordinator of Student Accessibility Services SUNY Polytechnic Institute 100 Seymour Road Utica, NY 13502 315-792-7304 sunypoly.edu