

EEL 3000: Introduction to Electrical & Computer Engineering

Syllabus – Fall 2018

Instructor: Dr. Henry Zmuda
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Office: 235 Larsen Hall

Office hours: Mondays 1:00 pm – 2:00 pm
Always available by appointment – just send me an email if you'd like to schedule a time.

TA: Ammar Nek
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Office: NEB 213 (IEEE Office)

Office hours: TBD

Class Meeting: Mondays 8nd and 9rd periods (3:00 – 4:55 p.m.), Room: Rinker Hall, Room 0110.

Catalog Description: (2 credits) Introduces electrical and computer engineering tools, both hardware and software. Professional ethics, career development. Assemble and test hardware project to provide hands-on experience.

Pre-requisites: None

Course Objectives: Learn about the Electrical and Computer Engineering professions, particularly the differences in sub-fields. Explore about career opportunities and how to prepare for them, and become aware of the tools and resources used in industry. Demonstrate the ability to communicate effectively and knowledge of professional issues such as ethics, contemporary issues, and continuing education.

Textbook Required: None

Software Required: Access to MATLAB

Grading: Attendance – 25%
Attendance will be taken within the first ten minutes of class. If you arrive between 3:10 and 3:15 you will be marked as tardy and receive only half credit for attendance. If you arrive after 3:15 you will be considered as absent. You must remain for the entire class.

Assignments:
MATLAB (3) – 20%
Essay assignments (4)– 20%

Electronic kits – 10%
Professional Organization Involvement – 5%
Exams – MATLAB Quiz 20%

1. Grading Scale –

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	0-59

The grade displayed on Canvas may not accurately reflect your actual grade. When or if there is a concern, please see either the instructor or the TA.

There is zero tolerance for academic dishonesty of any sort. Any suspected infraction will be reported to the Dean of Students Office.

Classroom Policy: As a matter of courtesy and respect for presenters, electronic devices (e.g., laptops, tablets, phones, etc.) are to be put away and NOT used during class unless instructed to so as part of the class. Any student violating this policy will be marked absent for that class.

Late Assignments: Assignments are due by midnight on the assigned due-date. Late assignments will receive the following reduction in grade:

- One day late (i.e., anytime after midnight of the due-date) – 25% reduction in grade
- Two (2) days late – 50% reduction in grade
- Three (3) or more days late – 75% reduction in grade

Make-up Policy

Since the class consists mostly of guest speakers, make-ups are not possible.

Attendance is not taken the first day of class.

One (1) unexcused absence is allowed.

Excused absences MUST be approved by the instructor. Excused absences include illness, unavoidable personal issues, professional travel, etc. Documentation is required.

If a MATLAB assignment is missed (including the final quiz) the make-up will consist of a project, generally of greater difficulty than the original assignment.

Please ask questions of our guest speakers!

Course Outline (see schedule for dates)

I. Introduction

- Overview of course - syllabus, class Website on Canvas

II. What is Electrical and Computer Engineering?

- Representatives from ECE and College of Engineering Student Services
- Representative from ECE Technical Support
- Career Development
- Overview of EE curriculum and CE programs
- ECE areas in department (faculty guest speakers)
- Undergraduate curriculum
- Grad school and research in ECE
- What are the career opportunities?
- Student and alumni perspectives
- ECE student leaders; IEEE, WECE
- Invited alumni speakers

III. MATLAB

- Tutorial and three homework assignments.

IV. Projects

- Construct a European Siren – really an exercise in learning how to solder
- Arduino microprocessor project

V. Learning to Write Concisely and Well

- Four short writing assignments to develop lifelong skills.
- Ethics essay used in determination of Sias Award

VI. Ethical issues for engineers

- Student honor code, case examples
- IEEE code of ethics, case examples
- Ethical Issues - patents, copyrights

VII. Other topics

- Finding a job, career choices
- Career Resource Center (guest speaker)
- Interns, co-ops, jobs, interview skills
- Documentation, patents, copyrights
- Industry trends

Academic Honesty:

All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others. For more details, refer to the [Academic Honesty Student Guide](#).

Accommodations for students with disabilities:

Students requesting special classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor.

UF Counseling Services:

Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

- University Counseling Center, 301 Peabody Hall, 392-1575
- Career Resource Center, 104 Reitz Union, 392-1601, career development assistance and counseling.
- Personal Counseling, SHCC mental Health, Student Health Care Center, 392-1171

Software Use:

All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.