

EEL 3000: Introduction to Electrical & Computer Engineering

Syllabus – Fall 2017

Revised 8/21/17 9:16 AM

Instructor: Dr. Henry Zmuda
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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 pm – 4:55 pm)
Room: Rinker Hall, Room 110

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%
Assignments:
MATLAB (3) – 20%
Essay assignments (4)– 20%
Electronic kit – 15%
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

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

An honor code infraction will typically result in a two (2) full letter grade reduction of grade in the course.

Attendance Policy

Attendance is not taken on the first day of class (August 21).

One (1) unexcused absence is allowed.

Class begins promptly at 3:00 pm. Attendance sign-in sheets will be available until 3:10 pm. Students arriving after 3:10 but before 3:20 will be given half-credit for attendance for that day. Arrival after 3:20 is regarded as an absence. Since many of the lectures are from outside speakers arriving late is rude and disruptive.

Excused absences MUST be pre-approved by the instructor. There are no retroactive approved absences.

Students are required to stay for the entire duration of the class. Leaving class early without pre-arranged permission is not permitted and will be not be treated as an absence but rather as a violation of the UF Honor Code.

Late Assignment Policy

Due dates for assignments will be clearly specified. Written assignment submissions are to be uploaded onto Canvas. Assignment must be submitted by midnight on the day they are due. Assignments submitted after midnight but before midnight of the next day will result in a 25% reduction in grade. Assignments that are two (2) days late will receive a 50% reduction in grade. Three (3) days late, a 75% reduction in grade. After three (3) days no credit will be given.

To avoid penalties due to unexpected circumstances, communicate with the instructor. Whenever you have a problem or a concern, TALK TO ME!

Make-up Policy

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

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.

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. Electronic Kits

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

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.