EEE 174: Introduction to Microprocessors.
Fall 2019

Instructor: Fethi Belkhouche
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Meeting Time: M/W: 1:30pm–02:45pm
Meeting Place: EUR 113
Lab Meeting Time: Monday: 6:30pm–9:10pm
Lab Meeting Place: RVR 4005
Office Hours: Tuesday 1-2pm, Thursday 9-10am,
Reading:
Introduction to Microprocessors and Microcontrollers by John Crisp.
Microprocessors and Interfacing by N Senthil Kumar, M Saravanan, S Jeevananthan, and Satish Shah
PIC Microcontroller and Embedded Systems: Using Assembly and C for PIC18 by Muhammad Ali Mazidi, Danny Causey, and Rolin McKinlay

Course description from catalog
EEE 174. Introduction to Microprocessors. Topics include: microcomputer systems, microprocessor architecture, machine and assembly language programming, timing operations, bus arbitration and exception processing logic, addressing modes, parallel and serial ports, memory, assemblers and development systems. The lab uses development systems and target systems in the Computer Engineering laboratory to assemble, link, test and debug and run various assignments. Lecture three hours; laboratory three hours.

Learning outcomes
After successfully completing the course, students will be able to:
• Describe the working principles of microcontrollers and microprocessors.
• Design and implement programs using integrated design environment (IDE).
• Use microcontrollers for data acquisition and control of input-output devices.
• Debug programs using modern software tools.

Grading policy
Student performance in this course is evaluated based on homework and quizzes, exams, and labs, weighted as follows:
• Homework and quizzes:11%
• Test 1: 16%
• Test 2: 16%
• Final Exam: 17%
• Lab: 40%

Homework and Quizzes
Homework is due in one week. Late homework will be returned without a grade.
Exams

There will be two exams with in-class and a final exam. The date of the exams will be announced in class. Make-up exams will not be given except in extraordinary circumstances.

Letter grade

Letter grade intervals are:

- **A**: $A \geq 94; 90 \leq A- < 94$
- **B**: $87 \leq B+ < 90; 83 \leq B < 87; 80 \leq B- < 83$
- **C**: $77 \leq C+ < 80; 73 \leq C < 77; 70 \leq C- < 73$
- **D**: $67 \leq D+ < 70; 63 \leq D < 67; 60 \leq D- < 63$
- **F**: Below 60

Note

Syllabus is subject to change.