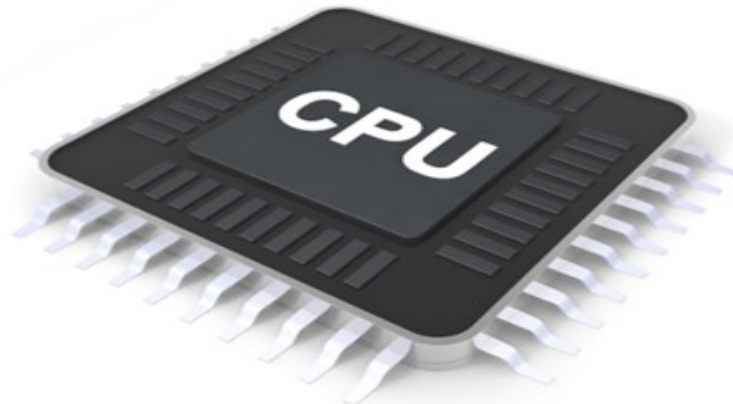# Syllabus

ENEE 3587

Microp Interfacing

Syllabus – Welcome to Microp

❖ **INSTRUCTOR: Dr. A. Alsamman**

  ➢ Office: EN 842, Phone: 280-7161

  ➢ Email: aalsamma@uno.edu

  ➢ Office Hours: TBA

❖ **COURSE INFO**

  ➢ ENEE 3587, Microprocessor Interfacing, Credit: 4 Hr.

  ➢ Prerequisites: ENEE 2582.

  ➢ EN321 9:00am – 10:40pm

❖ **TEXT**

  ➢ Class Notes will be available on Moodle.

❖ **TECHNOLOGY NEEDED**

  ➢ Computer for software development tools

  ➢ Internet connectivity and a computer with webcam (online attendance)

❖ GENERAL GOALS

➢ Knowledge of AVR microprocessor interfacing.

➢ Ability to control microcontroller hardware and interfaces through programming.

❖ OUTCOMES

➢ (1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

➢ (3) an ability to communicate effectively with a range of audiences.

➢ (6) an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

❖ TOPICS   Week

➢ Review of Number System   1

➢ Intro to Embedded Microp   1,2

➢ AVR Overview   3

➢ Programming the AVR   4

➢ Development Tools   5

➢ Parallel Interfacing   6

➢ Interrupts   7

➢ Timers   8-9

➢ PWM   10

➢ Serial Interfacing   10-11

➢ ATD/DAC   12-13

❖ GRADING POLICY

> ➤ Homework   10%
> ➤ Projects   45%
> ➤ 2 Tests   30%
> ➤ Final   15%

❖ ASSIGNMENTS

> ➤ Homework will be graded on effort.
> ➤ All homework will be assigned throughout the week and posted on moodle.
> ➤ Projects will require the use of the development hardware and software.

❖ TESTING

> ➤ 2 tests and 1 final test will be scheduled.
> ➤ Dates will be confirmed in advance.
> ➤ Tests will take a class duration.
> ➤ Tests will be comprehensive but will focus on more recent material

❖ IMPORTANT DATES

See https://www.uno.edu/registrar/bulletin/important-dates

Test 1	W 9/13
Test 2	W 10/18
Last day of classes	Th 11/29
Final Exam	W 12/6, 7:30am – 9:30pm

❖ MAKEUP POLICY

No makeup will be given for missed homework or examinations without valid excuses. The instructor will make decisions regarding the makeup in the case of valid and/or written excuse.

❖ Academic Integrity

Academic integrity is fundamental to the process of learning and evaluating academic performance. Academic dishonesty will not be tolerated. Academic dishonesty includes, but is not limited to, the following: cheating, plagiarism, tampering with academic records and examinations, falsifying identity, and being an accessory to acts of academic dishonesty. Refer to the Student Code of Conduct for further information. The Code is available online at http://www.studentaffairs.uno.edu.

❖ Students with Disability

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities should contact the Office of Disability Services as well as their instructors to discuss their individual needs for accommodations. For more information, please go to http://www.ods.uno.edu.

❖ Changes in Course Requirements

Since all classes do not progress at the same rate, the instructor may wish to modify the above mentioned requirements or their timing as circumstances dictate. For example, the instructor may wish to change test dates and material, the number and frequency of examinations, or the number and sequence of assignments. If such modification is needed, the student will be given adequate notification.