

ATENEO DE MANILA UNIVERSITY  
 Loyola Schools  
 Course Syllabus for 1<sup>st</sup> Semester, School Year 2013-2014

Department	ECCE	School	SOSE
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Course No.	CE 150
Course Title	<i>Computer Interfacing</i>
No. of Units	3

Course Description:

*This subject is designed to equip senior computer engineering students with the fundamental and hands-on concepts of sensors, computer interfacing and their applications. Aspects of buffering, address decoding, command decoding, timing and control needed in data transfers between various peripherals and a computer/microprocessor/controller are discussed. Design of interface using IC elements for commonly used peripherals, and interfacing different sensors to a computer, microprocessor or control unit are covered in this course.*

Course Objective/s:

*The course is "process-based" and aims to re-enforce the students' ability to look for and to discover solutions to computer interfacing projects and challenges in the professional world. The course aims to the extent practicable, students work on different aspects of computer interfacing, with the goal of developing "in-depth" insight on certain aspects, and a "helicopter view" of others.*

Course Outline:

- I. *Introduction to Computer Interfacing*
- II. *Introduction to sensors*
- III. *Introduction to actuators*
- IV. *Arduino system*
- V. *Processing*
- VI. *Interfacing sensors*
- VII. *Controlling actuators*
- VIII. *Introduction to Project Management*

References:

*arduino.cc*  
*processing.org*

Course Requirement:

<b>Class Work</b>	<b>90%</b>
5 interfacing exercises, 1 project	
<b>Class participation</b>	<b>10%</b>
class conduct, recitation, board work, assignments and problem sets	

Grading System:

<b>A</b>	<b>92+</b>	<b>B+</b>	<b>87-91+</b>	<b>F</b>	<b>below 59+</b>
<b>B</b>	<b>81-86+</b>	<b>C+</b>	<b>76-80+</b>		
<b>C</b>	<b>70-75+</b>	<b>D</b>	<b>60-69+</b>		

Other Matters:

**CLASSROOM POLICIES**

1. Class attendance is always checked (by the beadle).
2. Students are allowed 9 cuts. Exceeding the allowable number of cuts automatically merits a grade of W for the course.
3. Maintain an atmosphere of an academic classroom.

Mailing List

An optional mailing list (or e-group) shall be established for the course. Various materials may be distributed thru the mailing list. While membership in the mailing list is not a requirement of the course, students who do not join the mailing list are responsible for material(s) distributed thru the mailing list.

Consultation Info:

T 10:30 to 1:30 or W 10:30 to 1:30 or by appointment or via text or email

My contact info:

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