

HUDSON COMMUNITY COLLEGE
SCIENCE, TECHNOLOGY, ENGINEERING & MATH DIVISION

EET 228-01 SYLLABUS

PROJECT LABS

CREDITS: 2

PREREQUISITE: EET 214- Analog Integrated Circuits

TEXT: This is a capstone project course does not have a textbook. It consists of several phases in the process of building a project. The phases are illustrated in the course outline table

INSTRUCTURE:

Email:

Course Objective: Understanding how to build an Electronic Project, from beginning to its end. Transits through different Project Stages including Project Selection and approval by the Program Coordinator Dr. Issam El-Achkar, the Dean and other Faculty members. Understanding Project Scope, Background of the Project, Deliverables, Partial Testing, Completion, Debugging and in class Presentation.

Project Labs will provide the students with the skills and charts to keep real time control of accomplished steps and visibility of next steps to be implemented. Keeping a good track of Project Deliverables and partial testing of components and subassemblies will assure Project Completion in a timely manner and avoid final functionality problems that could affect the final grading of the Project

This subject will provide the tools to handle a future Projects in your future working environment

Attendance Policy: Attendance is **mandatory** at lectures and laboratory sessions. Material covered in missed classes is the responsibility of the students. If you miss two consecutive classes, you will be referred to the Division Dean. Students get a failing grade (F) in the course after 3 unjustified absences.

Homework: Problems related to covered topics are assigned on a regular basis. Selected problems will be discussed in class. Laboratory reports are due the following week after completion of the current experiment.

Grading Policy:

Based on Project Deliverables and Final Project Presentation.

Grading Range	A 90 - 100	B+ 85 -89
B 80 - 84	C+ 75 - 79	C 70 -74
D 60 -69	F 00 -59	

Disability Support Services: Students with disabilities who believe that they might need accommodations in this class are encouraged to contact the Disability Support Services at 201-360-4157 as soon as possible to better ensure that such assistance can be implemented in a timely fashion. All disabilities must be documented by a qualified professional such as a physician, licensed learning disability teacher (LDTC), psychologist, psychiatric nurse, licensed social worker or licensed professional counselor, who is qualified to assess the disability that the student claims to have and note recommendations on accommodations for the student. All information provided to the Disability Support Services Program will be confidential between the programs, professors involved with the student and the individual student.

Main topics to be analyzed within a Project

PROJECT SCOPE

Date

OVERVIEW

1. Project Background and Description

i Describe how this project came about, team members, and the purpose.

2. Project Scope

i Project scope defines the boundaries of a project. Think of the scope as an imaginary box that will enclose all the project elements/activities. It not only defines what you are doing (what goes into the box), but it sets limits for what will not be done as part of the project (what doesn't fit in the box). Scope answers questions including what will be done, what won't be done, and what the result will look like.

3. Deliverables

i Partial testing of ordered components and subassemblies by date. Avoid unpredictable malfunctioning of a final assembled project that could affect final submission and presentation date

4. Project Bill of Material and Cost

i List of ordered components, tracking cost and delivery date. Plan for spare part if takes too long to get the component in case of receiving a defective or we damage the component ourselves

5. Final Assembly, Testing and Debugging

i See if project work as expected. Adjust software and debug to assure fully functionality of the Project

APPROVAL AND AUTHORITY TO PROCEED

Approved By	Date	Approved By	Date
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Course Outline:

Week	Topic	Remarks
1,2	1-Choosing a Project Project Selection Fill out Project Scope Make sure you meet the project budget requirements	Choosing a Project Start Project Timeline Chart
3	2-Project Approval Project Approval by Dean, Program Coordinator and Faculty members	Read information related to the Project and Project Components from Manuals. Web. Product Documentation, etc. Update Project Timeline
4	3-Ordering Components Take thoroughly understanding of what is involved in buying the project components. Pay especial attention about what is included or not within your order Delivery date need to be guaranteed In case you need to order a different component from a different supplier make sure of the matching of all component's electrical specs. Example: order a 5v power supply to feed your equipment with the proper current rating to feed your equipment Order all the components early enough so that in case of any shipping damage or component malfunctioning	Update Project Timeline
5,6	3-Receiving components Open component delivered boxes immediately. Check for shipping and handling damages. Perform partial components test as possible, power them up to make an early judgement that they are in good condition and ready to be used in your project	Chapter10, p366 Update Project Timeline

7,8,9	<p>4-Project Assembly</p> <p>Practice wires and components soldering Make sure all components match their board location Keep strict control of temperature to solder components Use components data sheet to verify temperature, maximum solder (heat transmission time from the iron tip) temperature and distance to apply the solder from the end of the insertion leg of the components Avoid cold solders Use the proper soldering wire gage</p>	<p>The students need to be in the lab using soldering iron, soldering wire, learn and become familiar with temperature, cleaners and how to hold components to be soldered Update Project Timeline</p>
10	<p>5-Project Partial Testing</p> <p>Verify partial functionality of assembled components Make sure of reordering any suspected defective component</p>	<p>Be aware of delivery date of all your project components, to reorder them at any time, if needed Update Project Timeline</p>
11,12	<p>6-On Week 11 Final Project Presentation Abridge</p>	<p>In room 407 double checking that every project is fully functional and properly documented Update Project Timeline</p>
13	<p>7-Final Debugging</p>	<p>Final debugging/ correction for any problem, shown on week 11 including project documentation Update Project Timeline</p>
14	<p>8-Final Project Presentation</p>	<p>Dean, Program Coordinator other Faculty members on the Panel evaluation could be present Room 407 STEM</p>
15		<p>Reserved</p>

Notes: Project meetings in room 407 to verify Project Progress and provide help needed to students will be coordinated with Mauricio Aguirre our Lab assistance and myself

Email and phone support for the Project teams will be always available from Monday to Friday from 6pm to 9:30pm.

Academic Integrity Policy:

Academic integrity is central to the pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students earn college credits by their honest efforts. When they are awarded a certificate or degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value. Violations of the principle of academic integrity include:

- Cheating on projects.
- Reporting false research data or experimental results.
- Allowing other students to copy one's work to submit to instructors.
- Communicating the contents of an exam to other students who will be taking the same test.
- Submitting the same project in more than one course, without discussing this first with instructors.
- Submitting plagiarized work. Plagiarism is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work.

When students act dishonestly in meeting their course requirements, they lower the value of education for all students. Students who violate the college's policy on academic integrity are subject to failing grades on exams or projects, or for the entire course. Serious cases may be reported to a division dean or director for further disciplinary action, including suspension or dismissal from HCCC.

Detailed information on the College's Academic Integrity policy may be found in the *HCCC Student Handbook*. The handbook also contains useful information for students on completing research projects and avoiding plagiarism.

Hudson County Community College Classroom Recording Policy

Student Classroom Recording Policy

- Hudson County Community College prohibits the audio-visual recording, transmission, and distribution of classroom sessions. Classes may only be recorded with the advance written permission of the instructor. The Hudson County Community College classroom recording policy must be listed in all syllabi.
- All classroom recordings can only be used for academic purposes by students enrolled in that class. Recordings may not be shared, reproduced, or uploaded to public websites or other mediums, and these recordings may contain copyrighted material and are prohibited from any form of commercial use.
- All students and guests must be informed that the class may be recorded. Due to issues related to privacy and the possible inhibition of student participation, instructors should be mindful of the effects of permitting classroom recording.
- Instructors should retain electronic or paper copies of their written consent to grant classroom recordings.
- Students must destroy their recordings at the end of the semester.

- Students who are granted permission to record their class by the office of Disability Support Services should inform the instructor beforehand and are subject to the policies outlined in this document.
- Violation of this policy is subject to disciplinary action listed under the code of conduct as included in the Student Handbook.

Instructor Classroom Recording Policy

- Instructors may record their classes if students are informed in writing in advance that recording will take place. Instructors may distribute their own lectures, but this must be limited to the lecture portion of the class. Recordings of student presentations or activities may be used in the class if the students are notified in advance of the recording. Recordings of student presentations or activities may not be distributed in any way without the advance written consent of the students.