

Texas A&M University–Corpus Christi
College of Science and Technology
Engineering Technology

ENTC 4350 Capstone Projects
xxxx Semester xxxx

COURSE INFORMATION

Meeting Time:

Meeting Place:

PROFESSOR INFORMATION

Dr. Ray Bachnak

Office Address: Room ST 222D

Office Phone: (361) 825-6025

E-mail Address: rbachnak@falcon.tamucc.edu

Web Page Address: <http://www.sci.tamucc.edu/~entc/BachnakPage.html>

Office Hours: 9:30 a.m. –12:00 noon TR, and by appointment

Class Hours: TBA

COURSE DESCRIPTION

This is a capstone course designed to allow students to employ the knowledge attained in other courses. The student implements (including specification, building, and testing) the approved project in ENTC 4315, within budget and on schedule. Course requirements include a written report and oral presentations.

PREREQUISITES

ENTC 4315 Project Management and Justification

TEXTS

None

STUDENT LEARNING OUTCOMES

At successful completion of this course the students will have demonstrated their abilities to:

- Identify, analyze, and solve technical problems
- Apply creativity in the design of systems, components, or processes
- Use modern software and hardware tools
- Apply engineering methods and techniques to carrying out the project.
- Apply project management tools for managing a project. Microsoft Project will be used to develop a schedule of tasks necessary for the completion of the project.
- Communicate effectively (oral and written).
- Recognize the need for, and an ability to engage in lifelong learning – Demonstrated by having students prepare a written document indicating their perception of the need and their future educational plans
- Recognize the need for quality, timeliness, and continuous improvement – Demonstrated by having students submit a written statement that addresses their understanding of this need

- Describe and demonstrate the concepts and importance of professional, ethical, and social responsibilities-- Demonstrated by written analysis of an engineering ethics case study.

ASSESSMENT

Evaluation of student performance is based on oral presentations, progress reports, report draft, final report, and a final exam. The final grade is assigned as follows.

	Points		If	Grade
Project Review I	5		$90 \leq \text{Total} < \text{XX}$	A
Project Review II	5		$80 \leq \text{Total} < 90$	B
Project Review III	5		$70 \leq \text{Total} < 80$	C
First presentation	5		$60 \leq \text{total} < 70$	D
Report draft	5		$\text{xx} < \text{Total} < 60$	F
Final presentation and demo	20			
Final report	25			
Comprehensive exam	20			
Exhibit participation	5			
Self evaluation	5			
Total	100			

TENTATIVE COURSE SCHEDULE*

WK	Week of	Topics and Activities
1		Course requirements Life long learning Professional, ethical, and social responsibilities Project selection
2		Overview of projects (short descriptions by students) Preliminary project schedule Project review I (with advisor)
3		Project development
4		Project development
		Project development
5		Project development
6		Project review II (with advisor) Project development
7		Project development
8		Project development
9		Project review III (with advisor) Project development
10		Project development
11		Project development
12		Project development
13		Project development
14		Report draft due First project presentation Revise report
15		Final project presentation Project report due

16	Comprehensive Exam
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* Changes, if any, will be communicated to students by email.