



Department of Engineering Technology

CNET 4790 – Senior Design II Section 001/101 – Spring 2020 Syllabus

Lecture Meeting Times: Thursday: 2:30 pm – 3:20 pm
Meeting Room: NTDP F187

Lab Meeting Times: Thursday: 3:30 p.m. – 7:20 p.m.
Meeting Room: NTDP F187

INSTRUCTOR	Aloysius (Al) Attah, Ph.D., P.E.	EVALUATION	
OFFICE	NTDP F115G		
PHONE	(940) 565 – 2022	Project Abstract, Poster, and Report	50%
OFFICE HOURS Mon/Wed: 10:30 a.m. – 11:30 a.m. Tue/Thu: 01:00 p.m. – 02:00 p.m. Other Times: By appointment		Project Presentations	20%
		Pop Quizzes	20%
		Individual Contributions	10%
E-MAIL:	alloysius.attah@unt.edu	TOTAL	100%

COURSE DESCRIPTION

In this course, project teams specify, plan and perform management analysis of an engineering or construction product or process. Oral and written documentation required. Projects to be supplied by the local construction industry whenever possible.

PREREQUISITES:

CNET 4780

COURSE OBJECTIVES:

At the conclusion of this course, you should be able to:

- *implement* a team-based approach to construction projects.
- *prepare* documentation regarding site logistics, safety, budget, schedule, sustainability, value analysis, risk assessment, and business planning for a construction project.
- *communicate* the products of the planning process in oral and written formats.

COURSE OUTCOMES: (ABET Student Outcomes addressed):

- #10 Functioning effectively as a member or leader on a technical team. (ABET #4: an ability to function effectively as a member of a technical team).
- #12 Understanding of the need for and an ability to engage in self-directed continuous professional development.

- #14 Committing to quality, timeliness, and continuous improvement.

COURSE POLICY/GRADING:

Project Abstract, Poster, and Report:

- In the teams assigned for projects, each team will apply the requirements of the design project to the project abstract, poster, and report.
- The report should contain sections regarding the following:
 - Logistics and layout
 - Budget
 - Schedule
 - Sustainability
 - Value analysis
 - Risk assessment (**including safety plan**)
 - Business plan
 - Computer modeling (BIM, etc.)
- The report will be worth 50% towards the final grade.
- The abstract, poster, and report must be submitted by the due date shown on the schedule, and no late submissions will be accepted.

Project Presentation:

- Each team must present on their assigned project at **midterm, date for mock presentations**, and on **Senior Design Day** to the rest of the class and/or audience.
- For the **midterm** and **mock presentations**, the teams not presenting will grade the presenters' performance per grading rubric provided in this syllabus. The instructor will provide additional information on when each team will present.
- For the **Senior Design Day** presentations, the grades will be assigned based on the following distribution: 1/3 by the instructor, 1/3 by the project mentor(s), and 1/3 by all other evaluators.
- The presentation will be worth 20% towards the final grade. Students must participate in the presentations to receive credit.

Pop Quizzes:

- There will be pop quizzes designed to encourage class attendance and participation. The quizzes may be administered anytime during lecture or lab sessions. This will be worth 20% of the course grade.

Individual Contribution:

- As an appendix to the project report, each member of the project team must include a one-page statement that addresses their contribution towards the project, as well as the lessons they drew from carrying out the project. This will be worth 10% of the course grade.

Other Policies:

- This course will adhere to UNT academic policies, including those for academic integrity (<http://vpaa.unt.edu/academic-integrity.htm>) and overall conduct (<http://deanofstudents.unt.edu/conduct>). It is your responsibility as a UNT student to be familiar with these policies, but feel free to ask the instructor any questions pertaining to these.
- Any accommodations for differing abilities will be made for this course as per the policies and determination of the Office of Disability Accommodation: <http://disability.unt.edu/>

COURSE MATERIALS:

- No required textbook.
- Supplemental materials will be provided as necessary.

COURSE OUTLINE *Subject to Change*

WEEK-DATE	TOPIC	WORK DUE
1 – Jan. 16	Introduction to course.	
2 – Jan. 23	Project Abstracts	
3 – Jan. 30	Project Report Outline	
	Lab – Begin Logistics Plan and Layout	
4 – Feb. 6	Market Research – Business Case/Business Plan	
	Logistics Plan and Layout Due	Logistics Plan
5 – Feb. 13	Safety Program Detailed with Budget	
	Lab - BIM & Schedule Details	
6 – Feb. 20	Status Updates	
	Lab – Financial Details/Detailed Budget for Project	
7 – Feb. 27	Sustainability	
	Lab – Value Analysis	
8 – Mar. 5	Sponsor Day – Submit /Review Detailed Schedules	
9 – Mar. 12	NO CLASS (Spring break).	
10 – Mar. 19	Midterm PPT Presentations	Presentations
11 – Mar. 26	Submit Detailed Budget for Project	Detailed Budget for Project
12 – Apr. 2	Status Updates	Project Abstracts.
	Lab – Prepare Poster and Display	First Draft of Project Poster.
13 – Apr. 9	Risk Assessment	Register Projects.
	Lab – Prepare Written Report Draft	
14 – Apr. 16	Mock Presentations	Final Draft of Project Poster.
	Finalize Written Project Report	Written Project Report
15 – Apr. 23	Mock Presentations	Presentations
	Prep for Actual Presentations	
15 – April 24	Senior Design Day.	Actual Project Presentations
16 – Apr. 30	Meet as Needed.	
17 – May 7	No Class	

PRESENTATION GRADING GUIDE

PRESENTER NAME _____ COURSE NAME _____

SEMESTER _____ PROJECT TITLE _____

EVALUATION TOPIC	POSSIBLE POINTS	COMMENTS
1. Subject Introduction	0 1 2	_____
2. Organization of Topics	0 1 2 3	_____
3. Clear Descriptions	0 1 2 3	_____
4. Emphasized Pertinent Information	0 1 2	_____
5. Quality and Effective Use of Visual Aids	0 1 2 3	_____
6. Effective Conclusion	0 1 2 3	_____
7. Composure and Speaking	0 1 2 3 4 5 6 7 8 9 10	_____
8. Effective Demonstration with a working model	0 1 2 3 4 5 6 7 8 9 10	_____
9. Project Technical Content	0 1 2 3 4 5 6 7 8 9 10	_____
10. Subjective Evaluation	0 1 2 3 4	_____
Composite Score		_____

EVALUATOR'S COMMENTS _____

WRITTEN GRADING GUIDE

NAME _____ COURSE NAME _____

REPORT DATE _____ DUE DATE _____

PROJECT TITLE _____

EVALUATION TOPIC	POSSIBLE POINTS	COMMENTS
1. Objective	10	_____
2. Diagrams	10	_____
3. Expected Results	10	_____
4. Original Data Sheets	20	_____
5. Analysis of Results	10	_____
6. Conclusions	10	_____
7. Supportive Data	10	_____
8. Comments	10	_____
9. Professionalism signature	10	_____

Composite Score _____

EVALUATOR'S COMMENTS

Evaluator: _____

Date completed: _____