![North Central State College logo]

North Central State College
MASTER SYLLABUS
2019-2020

A. Academic Division: Business, Industry and Technology

B. Discipline: Engineering Technology

C. Course Number and Title: ENGR 4050 Senior Technology Capstone

D. Course Coordinator: Daniel Wagner
     Assistant Dean: Toni Johnson, PhD

     Instructor Information:
     - Name: Click here to enter text.
     - Office Location: Click here to enter text.
     - Office Hours: Click here to enter text.
     - Phone Number: Click here to enter text.
     - E-Mail Address   Click here to enter text.

E. Credit Hours: 3

F. Prerequisites: 90 credit hours, MECT4050c, ENGR3980 or MECT4910

G. Syllabus Effective Date: Fall, 2019

H. Textbook(s) Title: No textbook required

I. Workbook(s) and/or Lab Manual: None

J. Course Description: This course will provide each student with the opportunity to work in a team environment to solve design problems and to utilize his/her knowledge in critical thinking. Students will reach design decisions and will make oral and professional presentations to their peers and to professionals at term's end. Students are expected to show evidence of significant individual contributions to team efforts, as well as due consideration of such design aspects as effectiveness, material selection, ergonomics, safety, cost, effect on the environment, ethics, ease of production, etc.

K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	Project Proposal, Final Report Week 15. Communication Written VALUE Rubric
Communication – Speech	Oral Final Presentation. Communication – Speech VALUE Rubric
Intercultural Knowledge and Competence	Project Proposal – Intercultural Knowledge and Competence VALUE Rubric
Critical Thinking	Project Proposal, Progress Report, Final Report Week 15. Critical Thinking VALUE Rubric
Information Literacy	Project Proposal, Final Report Week 15. Information Literacy VALUE Rubric

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Quantitative Literacy	Project Proposal, Final Report Week 15. Quantitative Literacy VALUE Rubric

L.   Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Apply current knowledge and adapt to emerging applications of mathematics, science, engineering and technology,	Project proposal, progress reports, final report
2. Apply creativity in the design of systems, components or processes appropriate to program objectives,	Project proposal, progress reports, final report
3. Function effectively on teams,	Project proposal, progress reports, final report
4. Identify, analyze and solve technical problems,	Project proposal, progress reports, final report
5. Communicate effectively,	Project proposal, progress reports, final report, presentation
6. Create a plan for life-long learning	Project proposal, progress reports, final report
7. DAemonstrate a respect for diversity and a knowledge of contemporary professional, societal and global issues	Project proposal, progress reports, final report
8. Demonstrate a commitment to quality, timeliness and continuous improvement.	Project proposal, progress reports, final report

ABET Outcomes:
- *Outcome b*. Ability to apply current knowledge
- *Outcome d*. Ability to apply creativity in design
- *Outcome e*. Ability to function on teams
- *Outcome f*. Ability to identify, analyze and solve problems
- *Outcome g*. Ability to communicate effectively
- *Outcome h*. Recognition of lifelong learning
- *Outcome l*. Understand professional, ethical and social responsibility
- *Outcome j*, Knowledge of professional, societal and global issues
- *Outcome k*. Commitment to quality and improvement

M.   Topical Timeline (Subject to Change):

- Value Engineering
- Marketability
- Value Added Design
- Presentation Skills
- Public Speaking
- Budget Development
- Ethics
- Intellectual Property Overview
- Resume Development
- Professional Appearance

N.   Course Assignments:

- Project Proposal
- Progress Report
- Presentation
- Final Report

O.   Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70-72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63-66	D	1.00	Below Average
60-62	D-	0.67	Poor
00--59	F	0.00	Failure

P.   Grading and Testing Guidelines:

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Q.   Examination Policy:

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R.   Class Attendance and Homework Make-Up Policy:

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S.   Classroom Expectations:

Click here to enter text.

T.   College Procedures/Policies:

Important information regarding College Procedures and Policies can be found on the syllabus supplement located at https://sharept.ncstatecollege.edu/committees/1/curriculum/SiteAssets/SitePages/Home/SYLLABUS%20SUPPLEMENT.pdf