

A. <u>Academic Division</u>: Business, Industry and Technology

B. <u>Discipline</u>: Mechanical Engineering

C. <u>Course Number and Title</u>: MECT2910 Mechanical Design Project

D. <u>Course Coordinator</u>: Mike Beebe

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. <u>Credit Hours</u>: 1

Laboratory: 3 hours

F. Prerequisites: MECT2905 or MECT 2440 (c)

G. <u>Syllabus Effective Date</u>: Fall, 2019

H. <u>Textbook(s) Title</u>: None

I. Workbook(s) and/or Lab Manual: None; Class Handouts will be distributed

J. <u>Course Description</u>: This is a capstone course in the Associate Degree program; it brings together the course work and learning experiences from the mechanical engineering technology program. Students will participate in a mechanical design project to be completed following the procedures presented.

K. <u>College-Wide Learning Outcomes</u>:

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		
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	
Quantitative Literacy	Project Proposal, Final Report Week 15. Quantitative	
	Literacy VALUE Rubric	

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L. <u>Course Outcomes and Assessment Methods:</u>

Upon successful completion of this course, the student shall:

	Outcomes	Assessments – How it is met & When it is met
1.	Utilize engineering software to develop a project	Week 3 Project Proposal, Week 8 Progress
	design	Report, Final Report
2.	Utilize engineering manuals to compile relevant	Week 3 Project Proposal, Week 8 Progress
	data and formulae	Report, Final Report
3.	Collaborate with team members in problem solving	Week 3 Project Proposal, Week 8 Progress
	and design	Report, Final Report
4.	Effectively communicate with team members,	Final Report and Presentation,
	business partners, and during final presentation	Week 15

M. <u>Topical Timeline (Subject to Change)</u>:

- 1. Assignment and definition of problem
- 2. Engineering process and ethics
- 3. Preliminary investigations
- 4. Formulation of solution
- Fabrication and testing
- 6. Reporting of results

N. <u>Course Assignments</u>:

Graded assignments:

- 1. Project Proposal
- 2. Progress Report
- 3. Final Report
- 4. Oral Presentation

O. <u>Recommended Grading Scale</u>:

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	В	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

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P. <u>Grading and Testing Guidelines</u>:

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Q. <u>Examination Policy</u>:

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R. <u>Class Attendance and Homework Make-Up Policy:</u>

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S. <u>Classroom Expectations</u>:

Click here to enter text.

T. <u>College Procedures/Policies</u>:

Important information regarding College Procedures and Policies can be found on the <u>syllabus</u> <u>supplement</u> located at

https://sharept.ncstatecollege.edu/committees/1/curriculum/SiteAssets/SitePages/Home/SYLLABUS %20SUPPLEMENT.pdf

The information can also be found Choose an item.

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