



North Central State College
MASTER SYLLABUS
2018-2019

- A. Academic Division: Business, Industry and Technology
- B. Discipline: Engineering Technology
- C. Course Number and Title: ENGR2850 Engineering Economics & Organization
- D. Course Coordinator: Lynn Jones
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: MATH1110
- G. Syllabus Effective Date: Fall, 2018
- H. Textbook(s) Title:

Contemporary Engineering Economics with MyEngineeringLab access

- Author(s): Chan Park
- Copyright Year: 2016
- Edition: 6th
- ISBN: 9780134162676

- I. Workbook(s) and/or Lab Manual: None, Class Handouts will be distributed
- J. Course Description: A practical introduction to the economic analysis of capital investment. The economic portion of the course covers interest factors for present, annual, and future worth; rates of return; increment and sunk costs; and economic order quantity. The course also covers a broad overview of the operations of an industrial organization, emphasizing the relationship of basic functions and principles essential to efficient and profitable operation of industrial enterprises. Content covers such topics as organizational structure, production planning and control, purchasing, sales, personnel administration, ownership and financing, business ethics and compensation. (TAG # OES005)
- K. College-Wide Learning Outcomes

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	Writing assignments – at mid semester and by finals week
Communication – Speech	
Intercultural Knowledge and Competence	

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Critical Thinking	Homework assignments every third week, Midterm, Final Exam – at midterm and finals week
Information Literacy	Spreadsheet calculations, Week 3 and 9
Quantitative Literacy	Homework assignments every third week, Midterm, Final Exam – at midterm and finals week

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. Compute depreciation by straight line, sum of years' digits, and declining balance methods.	Midterm & final examination
2. Convert an irregular set of cash flows into an equivalent annual series with any desired interest rate.	Midterm & final examination
3. Compute rate-of-return on a capital investment generating a regular or irregular set of Cashflows, on a before tax basis.	Midterm & final examination
4. Determine economic lot size by formula.	Midterm & final examination
5. Compare alternative investments on the basis of annual cost or present worth.	Midterm & final examination
6. Compare multiple alternatives on the basis of rate of return on incremental investment.	Homework assignment, Midterm & final examination
7. Determine present, future worth, or annual payments of investments using Functional Notation and Interest Tables.	Homework assignment, Midterm & final examination
8. Define, disparage, and defend functional specialization, product specialization and facilities specialization.	Midterm & final examination
9. Make a Gantt Chart to schedule a project efficiently	Midterm & final examination
10. Identify and discuss three common types of business ownership	Midterm & final examination
11. Construct a PERT Chart and identify the critical path.	Homework assignment
12. Identify and explain the various methods of generating capital in a business.	Midterm & final examination

M. Topical Timeline (Subject to Change):

1. Equivalency and Time Value of Money
2. Interest Rate Tables and Formulas
3. Equivalent Annual Cost
4. Equivalent Present Worth
5. Unknown Interest Rate
6. Depreciation Accounting
7. Analysis of Multiple Alternatives, Kelvin's Law
8. Increment and Sunk Costs
9. Organizational Structure
10. Principles of Control
11. Business Ownership
12. Financial Management
13. Marketing

N. Course Assignments:

1. Written assignments
2. In-class problem solving
3. Midterm
4. Final Exam

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:

Click here to enter text.

Q. Examination Policy:

Click here to enter text.

R. Class Attendance and Homework Make-Up Policy:

Click here to enter text.

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>

The information can also be found Choose an item.