ENGR 1201 – Introduction to Engineering

Course Syllabus: Fall 2017

"Northeast Texas Community College exists to provide responsible, exemplary learning opportunities."

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	11am-1:30pm 3:30-5:00pm	12:30-1:30pm	11am-1:30pm 3:30-5:00pm	12:30-1:30pm	By Appt.	NA

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Catalog Course Description: An introduction to the engineering profession with emphasis on technical communication and team-based engineering design.

The course consists of one hour of lecture and three hours of lab each week. Prerequisite: MATH 1314 or equivalent.

Required Textbook(s):
Engineering Fundamentals: An Introduction to Engineering, 5th Edition, Moaveni, 2016
Publisher:
Cengage Learning
ISBN-13 Number:
978-1305084766

Recommended Reading(s):
None

Student Learning Outcomes:
Upon successful completion of this course, students will:

1. Describe the engineering profession and engineering ethics, including professional practice and licensure.
2. Use technical communication skills to explain the analysis and results of introductory laboratory exercises in engineering and computer science.
3. Explain the engineering analysis and design process.
4. Analyze data collected during laboratory exercises designed to expose students to the different engineering disciplines.
5. Describe the impact engineering has had on the modern world.
6. As part of a team, design a simple engineering device, write a design report, and present the design.
7. Demonstrate computer literacy.

SCANS Skills:
N/A

Course Outline:

Chap.	Title	*Week*	*Key Dates**
	Course Introduction	*1*	
1	Introduction to the Engineering Profession	*2*	
2	Preparing for an Engineering Career	*3*	
3	Introduction to Engineering Design	*4*	
4	Engineering Communication	*5*	
5	Engineering Ethics	*6*	
	Exam 1	***7***	***10/9 or 10/10***
6/7	Fundamental Dimensions and Units / Length and Length-Related Variables in Engineering (*Assign Team Project*)	*7/8*	
8	Time and Time-Related Variables in Engineering	*9*	
10	Force and Force-Related Variables in Engineering	*10*	
	Exam 2	***11***	***11/6 or 11/7***
	Bridge Design Project	*11*	
	Bridge Design Project (continued)	*12*	
14	Computational Engineering Tools Electronic Spreadsheets	*13*	
20	Engineering Economics	*14*	
16	Engineering Drawings and Symbols / Team Project Presentations / Review for Final Exam	*15*	
	Final Exam	***16***	***12/11 or 12/12***

(*)There will be one (1) Friday field off-campus field trips that will be scheduled during the semester.

Evaluation/Grading Policy:

Exams (3 @ 15% each)	45%	450 pts	
Quizzes/Homework (17 @ 1% each, drop 2)	15%	150 pts	
Engineering Paper & Presentation	10%	100 pts	
Small in-class Projects	5%	50 pts	
Bridge Project	10%	100 pts	
Team Project	15%	150 pts	
Total	100%	1000 pts	possible

Grading Scale:

A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, F = 0-59%

Other Course Requirements: A scientific calculator is required for this class and access to a personal computer, outside of the classroom, that capable of running trial versions of engineering software will be a valuable asset to the student during the course.

Student Responsibilities/Expectations: Regular and punctual attendance at all scheduled classes is expected. Attendance is necessary for successful completion of course work. There is no make-up on in-class quizzes and no allowance to turn in assignments late. Exams missed will be rescheduled only for instances of obvious emergencies, documented illness, and/or NTCC sponsored activities.

NTCC Academic Honesty Statement:
"Students are expected to complete course work in an honest manner, using their intellects and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. NTCC upholds the highest standards of academic integrity. This course will follow the NTCC Academic Honesty policy stated in the Student Handbook."

Academic Ethics:
The college expects all students to engage in academic pursuits in a manner that is beyond reproach. Students are expected to maintain complete honesty and integrity in their academic pursuit. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. Refer to the student handbook for more information on this subject.

ADA Statement:
It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with Shannin Garrett, Academic Advisor/Coordinator of Special Populations located in the College Connection. She can be reached at 903-434-8218. For more information and to obtain a copy of the Request for Accommodations, please refer to the NTCC website - Special Populations.

Family Educational Rights And Privacy Act (FERPA):
The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Other Course Policies:
There will be no cell phone usage in the classroom. Students will be warned if caught using a phone during class. A student will be removed from class if the disruption continues.

The college's official means of communication is via your campus email address. I will use your campus email address and Blackboard to communicate with you outside of class. Make sure you keep your campus email cleaned out and below the limit so you can receive important messages.