The University of Texas at Tyler
College of Engineering and Computer Science
Course Objectives, Syllabus, and Course Policy
Spring 2014

COURSE: **ENGR1201 – Introduction to Engineering**
Lectures: Mondays and Wednesdays 11 -11:50 a.m. (1100 hrs.) in RB 3035

REQUIRED TEXT: Studying Engineering 4th Edition, Landis, Raymond B., Discover Press, 2013, ISBN # 978-0-9793487-4-7.

INSTRUCTOR: Dr. J. Torey Nalbone, Office – RBS1005 – 903 565 5520– TNalbone@uttyler.edu --Office hours posted at the door or when other arrangements are made.

We will also have guest lecturers from time to time. An appropriate introduction will be provided when they arrive for their presentation.

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ABOUT THE COURSE

This course is all about you. It will focus on the tools for you to be a success in your journey as an engineering student. The course objectives are also the foundation stones for you becoming a successful practicing engineer. To meet these long term goals for the course and for you. We will see how math and science establish the foundation for engineering analysis and design and how we work to maximize the use of computers in support of our work. You will hear practicing engineers and computer scientist talk about real world engineering and computer science problems. You will do projects to be introduced to analysis and the engineering design process. We have seven (7) specific objectives in this course (listed below), each is focused on an essential skill for success as an engineering student and as a engineer in the future. They can be generally grouped and summarized as learning about how engineering impacted the modern world, introduce you to some of the tools and techniques you will need to complete your studies in engineering, and give you an appreciation for the engineering profession. In this course you will also explore how engineering has impacted the modern world

COURSE OBJECTIVES AND TOPICS COVERED

Course Objectives

a. Explain the engineering profession and engineering ethics.
b. Explain engineering analysis and design.
c. Use technical communication skills to explain the results/analysis of process of design and data presentation.
d. Contribute as a member of a design team to construct a simple engineering device, write a design report, and present the design as part of team.
e. Demonstrate computer literacy with the use of computer tools.
f. Analyze data collected during laboratory exercises.
g. Analyze the impact engineering has had on the modern world.

Topics Covered

- The impact engineering had in the Modern World
- Introduction to selected engineering disciplines (civil, mechanical, electrical engineering and computer science).
- Design project processes
- Technical report writing skills, style and proper documentation
- Technical presentation skills
- Design project
- Study skills through the use of library activities.
- Engineering competence through the use of standards, specifications and codes.
- Development of essential professional survival skills (resumes, social media, interviewing, etc.)

BLACKBOARD

Course syllabus and all course material including handouts will be posted on Blackboard. Please review all the material posted on Blackboard on a regular basis. We will also use Blackboard to post announcements and contacting students. Contact of student's may also be accomplished through e-mail. Only a student's assigned UT Tyler email address will be used for all course correspondence, so be certain to check it often.

ATTENDANCE

Regular attendance is imperative if you want to do well in this course. Therefore, **regular attendance is required** and a record of attendance will be made for every class meeting. A student's failure in meeting the minimum attendance requirement may result in a grade of "F" in the course (see grading section). In case you have to miss a class pleas e contact the instructor as soon as feasible, preferably prior to the absence. It is however your responsibility to keep up with the class work and be informed of all announcements made in the class on assignments, work to be submitted, lab/project reports, etc.

RESEARCH/TECHNICAL PAPER

Each student will write a research/technical paper in this course with both draft and final (revised) versions graded. Details will be announced in class. **Everyone will be required to take their outline and drafts to the writing center to be evaluated.** WRITING CENTER: Located in BUS 202, the UT-Tyler Writing Center provides professional writing tutoring for all students. When you use the Writing Center, you should plan in advance for a minimum of one-two hour-long tutorials per assignment: the first to assess your needs, and the second to follow up. Be prepared to take an active role in your learning, as you will be asked to discuss your work. While Writing Center tutors are happy to give constructive criticism and teach effective writing techniques, they will under no circumstances write your paper for you. Appointments are strongly encouraged: call 903-565-5995. Visit http://www.uttyler.edu/writingcenter/

DESIGN PROJECT

Each student is required to participate in a semester design project. You will be part of a team that will design an engineering device to perform a simple task, write a design report, and make a presentation of your design as a team. Details will be announced in class.

FINAL GRADES

Final grades are based on:		
Professional Practice	10%	200 points
Written assignments/Reports	22.5%	450 points
Technical Paper (Outline & Final)	30%	600 points
Team Design Report	22.5%	450 points
Team Design Presentation	10%	200 points
Project Demo	5%	100 points
Total	100%	2000points

What is Professional Practice? – There are certain expectations of professionals in the workplace (especially of engineers) and those same expectations are key components in this course and in preparing you for success as an engineering student. These practices demonstrate that an engineer is:

1) Prepared – students are expected to be prepared for the lesson by reading or completing assigned materials prior to class
2) Present – students are expected to attend class (see above) just as an employer counts on your presence at work we count on your attendance to class. Any student present less than 60% of the lessons may fail the course.
3) Punctual – students are expected to submit assignments according to the attached class schedule or due date provided on the assignment sheet. Assignments are due before class begins at the front of the class. Assignments turned in after class starts will be considered late. Homework turned in late, but prior to 5:00p.m. (1700 hrs.) on the date due will receive a 5% reduction. Homework turned in late, but within one day of the due date, will receive a 15 % reduction; homework turned in within two days of the due date will receive a 25 % reduction. *No credit will be given for homework turned in more than two days late*. **You May receive an Incomplete in the Course if all Assignments have not been submitted.** Obviously there may be circumstances that will occur and make a timely submission impossible. Notify me immediately and I will work with you if/when they occur.
4) Participating – students are expected to contribute to each lesson when called upon during class and as a member of their design/work teams.

WRITTEN ASSIGNMENT FORMAT

The production of a neat, organized, high-quality assignments cannot be overestimated nor can its importance to your course grade be overstated. An assignment should be something you are proud of and not something hastily "slapped together". Toward this end, considerable emphasis will be placed on not only getting the assignment completed, but also completed in accordance to format and style requirements. These format and style requirements are provided in Attachment 4, but will also be included in each assignments sheet. As an engineer your goal is to make a clear, logical, and professional presentation of your work, which is both accurate, correct and appropriately attributed to sources relied upon for your completion of the assignment. As previously mentioned, all submissions are due at the beginning of class on the due date. Late submissions should be placed in the NALBONE (ENGR 1201) folder in the file designated (HOMEWORK) in RBS 1003 any work submitted in the "HOMEWORK" folder will be considered late unless previous arrangements with the instructor have been made.

FINAL ASSIGNMENTS NOTE

All graded events are mandatory and will be used to compute your final grade in the course. Failure to submit any required work will result in a lower grade and **you may receive an Incomplete "I" in the course if all assignments have not been submitted.** All submissions are due in class on the date specified on the assignment or the course schedule. Final grades will be determined on the basis of the assignments submitted and the overall class average. If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed**.** Obviously there may be circumstances that will occur and make a timely submission impossible. Notify me immediately and I will work with you if/when they occur.

Laptops/PDAs/iPads/any MP3 players/Cell Phones or other electronic devices:

If you will be using an electronic copy of the course text please let the instructor know immediately. Other use of electronic devices during lecture is strictly prohibited, unless their use is included in the lesson for the day or it has been included in an authorized accommodation plan written by the Office of Student Services and a copy provided to me. Need for electronic devices will be identified for certain class topics. All other uses will be subject to the following plan:

a. Since the use of phones and MP3 players is not permitted during lectures, the first occurrence of disregard for this rule will result in a verbal warning. The second occurrence of phone and/or MP3 use, for any reason, you will be asked to leave the class. Upon the third occurrence or disregard for this rule may result in the forfeiture of the device, and you will receive a reduction the appropriate Professional Practice grade in the course (10%) of your Final Grade.

b. If you plan to record the lectures for your personal use please notify the instructor and provide the information about the device you will be using. Laptops or other electronic device are not permitted for notes taking in this course but may be required for the lesson as indicated on the course schedule.

Academic policies regarding withdrawal from the course, state-mandated course drop rule, grade forgiveness, student rights, absence for religious observance, grade replacement, social security and privacy, learning disability, academic dishonesty and others can be found at http://www.uttyler.edu/academicaffairs/syllabuspolicies.pdf . And are reproduced for your convenience below:

1. Academic Misconduct: Plagiarism of homework and cheating on examinations will be interpreted as academic misconduct and will not be tolerated. Please refer to the University of Texas at Tyler current Undergraduate Catalog for academic policies and Manual of Policies and Procedures for Student Affairs (MOPPS, Chapter 8) regarding academic integrity, cheating and plagiarism. Academic dishonesty will not be tolerated. Ignorance of the rules and policies provides no protection from the consequences.

2. Students Rights and Responsibilities. To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: http://www.uttyler.edu/wellness/StudentRightsandResponsibilities.html

3. Grade Replacement/Forgiveness. If you are repeating this course for a grade replacement, you must file intent to receive grade forgiveness with the registrar by Census Day (see Schedule of Topics). Failure to do so will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates will receive grade forgiveness (grade replacement) for only three course repeats during his/her career at UT Tyler. Als, please notify the instructor so that they know about your circumstance.

4. State-Mandated Course Drop Policy. Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the Census Day (See Schedule of Topics for the specific date). Exceptions to the 6-drop rule include, but are not limited to, the following: totally withdrawing from the university; being administratively dropped from a course; dropping a course for a personal emergency; dropping a course for documented change of work schedule; or dropping a course for active duty service with the U.S. armed forces or Texas National Guard. Petitions for exemptions must be submitted to the Registrar's Office and must be accompanied by documentation of the extenuating circumstance. Please contact the Registrar's Office if you have any questions. Please contact the instructor prior to dropping the course to receive any guidance in your course progress.

5. Disability Services. In accordance with federal law, a student requesting accommodation must provide documentation of his/her disability to the Disability Support Services counselor. If you have a disability, including a learning disability, for which you request an accommodation, please contact Ida MacDonald in the Disability Support Services office in UC 282, or call (903) 566-7079. Additional information may also be obtained at the following UT Tyler Web address: http://www.uttyler.edu/disabilityservices

6. Student Absence due to Religious Observance. Students who anticipate being absent from class due to a religious observance are required to inform the instructor of such absences by the second class meeting of the semester.

7. Student Absence for University-Sponsored Events and Activities. If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed. This includes University Athletes who should also provide a notice to the instructor of their athletic participation by the third class meeting

8. Social Security and FERPA Statement. It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically nor will they be discussed with anyone outside of the University without your permission and in most cases presence during the discussion.

9. Emergency Exits and Evacuation. Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. For Tornado warnings the safe areas within the building have been designated. The Instructor will identify to you these safe refuge areas. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Tyler Police, Fire Department, Fire Prevention Services, or other official Public Safety personnel.

ENGR 1201
Schedule of Topics
Spring 2014
Subject to change and Revision as needed

Week	LSN	DATE	Lesson Content covered	Lecturer	Assingment		Reading
					OUT	DUE	
1	1	13-Jan	Course Introduction/Dean's Welcome	Nalbone/Nelson			Prologue
	2	15-Jan	Keys to Engineering Student Success	Nalbone	HW1		Ch 1
2		20-Jan	NO CLASS (Martin Luther King Jr. Holiday)				
	3	22-Jan	Computer Tools for Engineers	McCaslin			
3		27-Jan	Census Day				
	4	27-Jan	The Engineering Profession/Engineering Ethics	Nalbone	HW2	HW1	Ch 2
	5	29-Jan	Professional Licensing and Graduate School	Sathyamoorthy			
4	6	3-Feb	Oreintation to Engineering Education	Nalbone	HW3	HW2	Ch 8
		5-Feb	20th Class Day				
	7	5-Feb	Time Management	Jones			
5	8	10-Feb	Implications of Social media in your Professional	Brooks	HW4	HW3	
	9	12-Feb	Design Objectives and Engineering Constraints	Nalbone			
6	10	17-Feb				PD1	
	11	19-Feb	Specification and Codes and Standards	Nalbone	HW5	HW4	
7	12	24-Feb	Library Research and Engineering Resources	Altamirano	TP1		
	13	26-Feb	Student Services	Harvey-Livingston			
8	14	3-Mar	Personal Growth and Student Development	Nalbone		HW5	Ch 6
	15	5-Mar	Carrer Services Resume writing	Albert	HW6	PD2	
		10-14 Mar	SPRING BREAK				
9	16	17-Mar	Understanding the Teaching/Learning Process	Nalbone		TP1	Ch 3
	17	19-Mar	Making the Most of How You Are Taught	Nalbone	TP2		Ch 4
10	18	24-Mar	Building a Presenation	Nalbone	HW7	HW6	
		26-Mar	LAST DAY TO WITHDRAW (W)				
	19	26-Mar	Making the Learning Process Work for You	Nalbone		PD3	Ch 5
11	20	31-Mar	Introduction to Civil Engineering	Nalbone	HW8		
	21	2-Apr	Civil Engineering in the Real World, practitioner	CE Alumnus		HW7	
12	22	7-Apr	Broading Your Education	Nalbone	HW9	TP2	Ch 7
	23	9-Apr	Introduction to Electrical Engineering	Ochoa		HW8	
13	24	14-Apr	Electrical Engineering in the Real World, practitioner	EE Alumnus			
	25	16-Apr	Introduction to Mechanical Engieering	McCaslin		HW9	
14	26	21-Apr	Mechanical Engineering in the Real World,	ME Alumnus		PD4	
	27	23-Apr	Introduction to Computer Science	Tran			
15	28	28-Apr	Computer Science in the Real World, practitioner	CS Alumnus			
	29	30-Apr	Group Presentations				
16		5-May	Study Day				
	**	9-May	**Finals Week May 5-10, 2014**				

Text readings are from *Studying Engineering,* **Discover Press**

**Subject to Official *Final Schedule* as Published by the University

HW	Homework Assignments
PD	Project Deliverable
TP	Technical Paper (1=Outline, 2=Completed Paper)