Introduction to Engineering
Spring 2018
ENGR 10
Section #52055

Instructor: Dr. John Heathcote
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Class Times: MW 12:00-12:50 pm
Room: PHY-70

Come see me in my office!

I am usually available most mornings between 10 and noon in my office. If you see me in my office, I am available to answer your questions or just to discuss engineering! Please come by!

My official office hours are:

TTh	1:00-1:50 pm
F	10:00-10:50 am

Welcome to Introduction to Engineering!

I would like to welcome you to ENGR 10. This is a fun and enlightening course in which you will learn more about the career field of engineering while taking part in design projects and other group activities that will keep you engaged. We will also prepare you for the challenging academic study of engineering by discussing the types of personal study skills you will want to develop. I look forward to helping you in this course and I hope to see you in many more engineering courses in the future!

Required Text: Landis, R., Studying Engineering, 4th Edition, Discovery Press, 2013

Catalog Description:

This course is an introduction to the engineering profession for students interested in a career in engineering or technology. Topics include opportunities in engineering, education plans, internships, the design process, analytical problem solving techniques, project management, and professional ethics. Hands-on projects are used extensively in the course.

Grading:

Daily In-Class Grades	25%
Individual Assignments	40%
Group Projects	25%
Final	10%

Grading Scale:

90-100%	A
80-89.9%	B
70-79.9%	C
60-69.9%	D
<60%	F

Daily In-Class Grades: This class is different from most engineering classes as the work is less mathematically oriented and objective and is more a subjective look at some of the aspects of a career in engineering. In order to help each student to learn about the career of engineering and to prepare the student for an engineering education, participation in class activities is a MUST. Active participation in each class period will earn you the points in this category. It is important to attend every class! **You will begin the semester with 100 in-class points. For each class meeting that you miss, you will lose 5 of these points. You will lose 2 points for each class meeting for which you are late.**

Individual Assignments: You will be given regular assignments that you will need to complete on your own. Many of these assignments will involve reading from the textbook and then writing your answers to questions based upon your thoughts of the reading. You will also give at least one individual presentation, and complete other assignments such as developing your student education plan, career planning exercises, and constructing a resume.

Group Projects: Working as an engineering team is a big theme of this course. Throughout the semester, we will have you work together in groups in small design challenges, research presentations, and in the SCCCD Engineering Design Challenge.

SCCCD Introduction to Engineering Design Challenge: Each semester, students in this course compete in an engineering design competition. It is an enjoyable exercise in which teams of students design and build contraptions to meet an assigned goal. The competition will be held at Fresno City College on Saturday, April 7th. More details of the competition will be made available as soon as possible. It is the student's responsibility to notify the instructor well ahead of time, if he/she cannot attend for a justifiable reason. **An alternative assignment** (a written paper on some aspect of engineering) will be given to students who cannot attend the competition.

Final Exam: As a way of summing up what you have learned from this course, a final exam will be taken during finals week. This will involve topics that we have discussed or studied throughout the term.

Attendance: Attendance is mandatory. Class attendance will be recorded. In accordance with college policy, if a student misses more than four class sessions, that student may be dropped. (However, if you decide to drop the course, it is **your** responsibility to make the drop official in the Administrations and Records Office or else possibly receive a grade of F.)

Cheating and/or plagiarism: Cheating and/or plagiarism will not be tolerated. A student will receive no credit for the assignment if in the opinion of the instructor the individual has cheated.

Accommodations for Students with Disabilities:
If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Add Date:	Friday, January 26	Last day to add a course
Drop Date:	Friday, March 9	Last day to drop this course
Holidays:	Monday, January 15	Martin Luther King Jr. Day
	Friday-Monday, Feb. 16-19	Presidents' Day Holidays
	Monday-Friday, March 26-30	Spring Recess Holidays
Final:	Monday, May 14, 12:00-1:50 pm	

COURSE OBJECTIVES:

In the process of completing this course, students will:

1. describe the role of engineers in society and classify the various branches of engineering, the functions of an engineer, and the industries in which they work.
2. describe how products are designed and created by engineers.
3. investigate new products being developed by engineers.
4. develop and apply effective strategies to succeed academically.
5. identify and describe academic pathways to bachelor's degrees.
6. investigate engineering career and internship opportunities.
7. develop a resume and cover letter for an engineering internship.
8. evaluate an engineering job and compare it to their own career interests.
9. discuss the standards of engineering ethics.
10. apply ethical standards towards engineering case studies.
11. analyze the application of the engineering design process toward the creation of a product.
12. work in engineering teams to apply the engineering design process toward meeting an engineering challenge.
13. write technical documents and present oral presentations based upon an engineering project.

Academic Dishonesty

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights. Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.