

ENGR 5 - Engineering as a Profession

Syllabus

Course Description:

This course is designed for you to explore what it is like to be an engineer, and what it will take to become one. Our purpose is to enhance your success as a student and as a person.

What we are going to do:

Work in teams	Meet practicing engineers	Watch films
Go on a field trip	Take something apart	Find out how something works
Have discussions	Design and build something	Make friends
Plan for the future	Make schedules	Learn something about ourselves
Set goals	Invent	Make and view presentations
Use engineering tools	Research and write about interesting topics	Solve problems

What you will get out of this class (Student Learning Outcomes):

When you complete this class you will be able to:

Student:

- 1.
- 2.
- 3.

Instructors:

1. Find your place in relation to the nature and function of engineers in society.
2. Evaluate your personal knowledge, skills and attitudes in order to formulate goals and create a plan for completing your education.
3. Use effective strategies to reach your full personal, academic and professional potential

College:

1. Develop and understanding of the nature and function of engineers in society.
2. Evaluate and develop effective strategies to reach full academic and professional potential.
3. Analyze engineering problems using the engineering design process.

COURSE INFORMATION & REQUIREMENTS

Class Hours Fridays: 3:00-5:05 pm. Room D101 Watsonville Campus
Textbook *Studying Engineering* by Raymond B. Landis, 3nd or 4th ed.
ISBN:978-0-9646969-2-1 or 978-0-9793487-4-7

You are required to bring a notebook, the textbook and all handouts to class.

Instructor:

Karen Groppi, P.E.

Telephone & voicemail: 477-3500

Email: kagroppi@cabrillo.edu

Office Hours: Friday 2:30-3:00 pm and 5:05-5:35 pm Rm D101

For other times see: <http://www.cabrillo.edu/~kagroppi>

Participation:

- Individual and group participation are mandatory for all classes.
- For excused absences call or email your instructors prior to the class meeting time.
- Your participation grade will be increased by:
 - Asking and answering questions during discussions
 - Completing your share of tasks during group work
 - Giving constructive feedback.
- Reductions in participation grades will occur for:
 - Being absent without notification
 - Arriving more than 10 minutes late or leaving early without notification
 - Texting, surfing the internet or inappropriate use of phones or computers during class activities
- You are responsible for class material missed when absent.

Participation will be graded as follows: Each day you will receive 1 point for full participation; or ½ point for reduced participation; or 0 points for not attending and not notifying the instructor before the class starts.

Assignments:

You will find all course materials including the assignments, specifications for completion and due dates on the course website: <http://www.onlinecabrillo.org>

Assigned homework is **due at the beginning of class** on the due date.

If your absence is excused, your homework will be accepted at the next class meeting.

Engineers are often judged by the quality of their work. Professional quality work includes:

- All assignments typed, single spaced, .75" margins, double sided.
- All work submitted on 8.5" x 11" paper shall be stapled and include page numbers.
- Use a header in the top right corner of the page that lists your name, assignment number, date and "Engr 5".
- Text and information should be organized, neat, free from spelling and grammatical errors and easily understood.

Grading:

Each assignment will be worth 10 points and will be graded on how well the work meets the given criteria in the assignment specifications.

Final Grade:

Participation	40%
Assignments	40%
Final Project	20%

All of the above will be graded on a percentage basis. The letter grade at the end of the course will correspond to the average of all scores as follows:

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

Withdrawal:

If you plan to withdraw, please let the instructor know and then drop officially online, by Sunday February 9, 2014 to avoid receiving a grade. If you drop after the second week you will receive a W on your transcript and must drop by Saturday April 26, 2014 to avoid receiving a grade.

Disabilities:

We encourage students with disabilities, including "invisible" disabilities such as chronic diseases, learning, and psychological disabilities, to explain their needs and appropriate accommodations to us during office hours. If you require physical or learning accommodations for this class, please verify these accommodations through Cabrillo's Disabled Student Programs & Services (479-6379) or the Learning Skills Program (479-6220). Please bring a verification of your disability from the Learning Skills or DSP&S offices and a counselor or specialist's recommendations for accommodating your needs.

Classroom Environment:

In the interest of maintaining an optimum space for learning you are expected to treat each and all members of the class with respect. Students are expected to know and follow the general guidelines for conduct presented in the online document, http://cabrillo.edu/services/studentaffairs/documents/SRRFinalRevision4.3.2012_000.pdf

Academic dishonesty will not be tolerated in any form. You are encouraged to work on assignments with other students, however work submitted with only your name on it must be the result of your own unique effort. This includes all graded work and computer files. We do not accept remarkably similar assignments. Students who engage in violations of academic integrity (cheating, plagiarizing print or internet sources, copying computer files, etc.) are subject to disciplinary action by the instructor and or the college, including receiving zero points for the assignment, being dropped from the course with a "W", being issued an "F" for the course or being suspended from the college. See http://cabrillo.edu/services/studentaffairs/documents/SRRFinalRevision4.3.2012_000.pdf.

Sustainability:

Cabrillo College has signed on to the American College and University President's Climate Commitment (ACUPCC), <http://www.presidentsclimatecommitment.org/> thereby promising to reduce the campus carbon footprint. Here are some ways we can help Cabrillo and our community meet our sustainability goals. What can you add to the list?

- Minimize handouts: materials will be made available online and/or displayed onscreen during class to reduce paper use/waste and copying costs.
- Minimize printing: Print only when you really need a hard copy. Preview before printing.
- Use small .75" to .5 " margins & single spaced text and double-sided prints when you do print work. Ask your other instructors if this will be acceptable in their class.
- Recycle! Look for appropriate bins for containers, paper and waste.
- Save energy: If you notice that the door is open and the heat is running, please close the door.
- Shut down the computer before you leave.
- Reduce your commute impact: bike, bus, or carpool. Over half of Cabrillo College's carbon footprint is due to commuting, mostly solo trips in cars.