

Syllabus for Engr 10: Introduction to Engineering

This course introduces students to engineering with the goal of each student making an individual plan to succeed in their desired career path. Students will be exposed to several engineering disciplines through readings, discussion, project design, and problem solving. In-class work, at-home hands-on activities, and a group project will give students opportunities to practice thinking like engineers.

This course meets online on Mondays, Wednesdays, and Thursdays from 1:30 pm to 2:20 pm. Students are expected to spend 3.5 hours a week in asynchronous work.

Instructor: Anna Hawes

Email: hawesanna@fhda.edu

Office Hours: Mon/Weds 2:30-3:30 pm, via email/chat or scheduled Zoom

Course Website: Because this course is remote, the majority of classwork will be completed through the course website on Canvas. Class meetings will also be accessed through Canvas Zoom.

Required Textbook/ Materials: You will not be required to purchase a textbook for this class. Readings will be assigned from articles that can be viewed online. Due to the remote nature of this course, minimal materials will be required. There will be a few hands-on lab activities that will require the use of materials you have around you. You may want to collect and save useful materials in anticipation of these activities. Such materials may include cardboard, tape, plastic containers, string, etc. We will also have some class periods working on programming with an Arduino. I will be demonstrating with a free simulation that will also be accessible for you to use. Should you wish to purchase a physical kit, I can direct you to appropriate options but that is not necessary.

Course Grades: Graded coursework will include in-class activities and assignments assigned for work out of class. In-class work will include participation in groups as well as individual assignments. Asynchronous work (done on your own time) will include hands-on activities, essays, and participation in Canvas discussion boards. All asynchronous work is due by the end of Sunday that week. The final exam will be administered on March 27th, on Zoom, from 1:45 pm - 3:45 pm. If you skip the final, you cannot pass the class.

Drop Policy: Enrollment is your responsibility. If you decide not to take this class, please drop before January 22nd to avoid getting a 'W'. I will drop students who do not attend any class in the first two weeks.

Online Participation: Attendance and participation are key components of this class. Please keep your webcam turned on during class. This helps us to learn from each other and get to know each other, one of the main benefits of this introductory course. If you will have difficulty using a webcam, please communicate that to me through email. Students should be prepared to unmute to answer questions, especially in breakout rooms. Otherwise, students should be respectful of their classmates and the instructor by being muted and only using the chat function when prompted.

Late Assignments, Missed Classes: Lectures will be recorded on Zoom and made available on Canvas. In-class work can be completed for full credit at any time before the start of finals week. If you miss class, you should watch the recorded lecture, complete the work that was assigned, and contact me if you have any questions. Exceptions to this include the attendance quizzes, presentations, and group work (see below for more details). Asynchronous assignments may be turned in late but will have points deducted for each day late. However, it will always be worth some points to turn in late work so long as it is completed well. The final day to turn in late work is the day before finals start. If there are extenuating circumstances affecting your ability to attend class and/or complete work, please let me know as soon as possible and I will work with you to find a solution.

Attendance quizzes: Students will often be assigned reading to complete before class. Short quizzes will be taken at the start of class to assess the completion of that reading (and take attendance). These quizzes will occur in the first 5 minutes of class and cannot be made up so be sure to be on time. At the end of the quarter, I will drop your two lowest reading quiz scores from the calculation of your grade.

Group work: A significant portion of your grade will come from completing a group project. You will be expected to work with your group during the appointed class times. You may also need to work outside of class times though your group may decide to do that work individually rather than as a group. If you need to miss group meetings for any reason, please contact your group members to let them know and be sure to complete your appointed tasks. You will grade your team members on how well each of you completed the work. Please let me know if there are any issues with contacting team members, team members not completing assigned tasks, etc.

Presentations: You will give 3 different presentations this quarter: two individual and one as a group. One presentation will be on a current event and you will sign up for a date to present. The sign up sheet and instructions are on Canvas. The dates for the group presentation and the final presentation will be set by me. If you cannot present when assigned please contact me but accommodations will only be made for grave situations.

Exams: Most of the classwork will be project-oriented so we will only have one exam, which will be the final exam on March 27th, on Zoom, from 1:45 pm - 3:45 pm. It will be administered

through Canvas but students must sign into Zoom while taking the exam. If this is going to be a problem for you, please email me as soon as possible.

Academic Honesty: Ethical behavior is critical for you now, as a student, and later, as an engineer. Especially with remote learning, I will be relying on your integrity to avoid behavior that would result in an unfair advantage over your classmates. This would include giving or receiving help on exams or quizzes from other students or materials not made available by the instructor. It also includes using ideas from another source without giving credit to that source. Non-ethical behavior will result in penalties including, but not limited to, a referral to college administration and/or zero credit for the work. See more information on expected student code of conduct here: https://www.deanza.edu/policies/academic_integrity.html

Disability Statement: To obtain disability-related accommodations, students must contact the Disability Resource Center (DRC) as early as possible. To contact DRC, you may

Email at dss@deanza.edu Call at (408) 430-7681

Zoom the DSS Virtual Help Desk. Hours and links at <https://www.deanza.edu/dsps/dss/>

Go in person to the Registration and Student Services Bldg., DSS Office RSS 141. Hours at <https://www.deanza.edu/dsps/dss/>

If you already have an accommodation from DRC, please email me to discuss your needs.

Available Resources:

The Foothill- De Anza college district has many resources available for students. Please check campus websites and appropriate resource centers for help for veterans, international students, food/housing assistance, room for Zooming, and more.

Student Learning Outcome(s):

*The student will be able to analyze, graph and develop a formula for a given data set.

*The student will be able to prepare and write technical specifications and documentation, and be able to orally present them.

*The student will work collaboratively on an engineering team.

Office Hours:

M,W 02:30 PM 03:30 PM Zoom