Syllabus for Engr 10: Introduction to Engineering

This course is an introduction to engineering design through a variety of team projects, including experimentation, data analysis, and the development of computer skills. Students will be exposed to several engineering disciplines through project design and problem solving for the purpose of providing information to assist them in choosing a major.

This course meets online on Mondays, Wednesdays, and Thursdays from 9:30 am to 10:20 am. Students are expected to spend 3.5 hours a week in asynchronous work.

Instructor: Anna Hawes
Email: hawesanna@fhda.edu
Office Hours: Tues/Thurs 7-8 pm, via email/chat or scheduled Zoom

Required Textbook: You will not be required to purchase a textbook for this class. Readings will be assigned from articles that can be viewed online.

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. The final exam will be administered on March 21st, on Zoom, from 9:15 am - 11:15 am. 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 16th to get a refund. (Dropping by January 17th will not give you a refund but will allow you to drop without a 'W'.) I will drop students who do not attend any class in the first two weeks.

Exams: Most of the classwork will be project-oriented so we will only have one exam, which will be the final exam. It will be administered through Canvas but students must sign into Zoom and take the exam with their webcam on. If this is going to be a problem for you, please email me as soon as possible.

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.

In-class quizzes: Students will often be assigned reading to complete in between class periods. Short quizzes will be taken at the start of class to assess the completion of that reading. These quizzes will begin at the start of class and cannot be made up so be sure to be on time.

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

Late Assignments, Missed Classes: Lectures will be recorded on Zoom and made available on Canvas. In-class work cannot be made up. Essays and lab assignments may be turned in late via email but will receive a penalty of one letter grade for each day late. 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.

Class materials: 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.

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,
            Tuesdays and Thursdays, 8AM - 5PM
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, 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.