### ONLINE ONLY DUE TO NOVEL CORONAVIRUS

Santa Rosa Campus, Santa Rosa Junior College, Santa Rosa CA, USA

## **Introduction to the Engineering Profession**

Section: 4770 and 4763 (W 7-9PM/Th 330-530PM respectively)

Instructor: Tony Martin - Adjunct Instructor

Email: amartin@santarosa.edu

Office Hours: After every class (15 mins), or by appointment

#### **Course Goals**

- 1. Improve the peer environment by building students into a supportive and enthusiastic academic community.
- 2. Develop the study, communication, and organizational skills that will bring success in your current academic career and your future engineering career.
- 3. Orient the students to the environment and resources of this college and other engineering schools.
- 4. Motivate students through an increased awareness of the opportunities and rewards of a career in engineering.

# <u>Grading</u>

Grades are based on Attendance and Class participation (you have to come to class), Homework, Oral Report, and Final Invention Project.

Total Points = 1700 points.  $16 \times 40$  class attendance = 640 = 37.7% of grade = 80 = 4.7% of grade = 220 Orals = 220 = 12.9% of grade = 220 = 12.9% of grade = 520 = 31.8% of grade = 240 Final Invention Project = 240 = 14.1% of grade

# (Total and change in content may occur due to circumstances beyond my control such as wildfires, cataclysms and such)

- 40 points lost for each missed class. (>4 missed classes drops 1 letter grade!)
- 20 points lost for each time late to class. (>10 minutes)
- 40 points at risk on any individual assignment, except Resume and Cover Letter which are 50 and 30 respectively.
- Up to 20 points lost for a late assignment, dependent on teacher discretion for exemption!
- 220 points at risk for your oral presentation.

A >90% B >80%

C >70%

D >60%

F <60=%

#### **Attendance IS GRADED**

This is a participatory class not a lecture class.

- You will learn from your fellow classmates and your own investigations; you have to be here to do that. Learn how to network, work with others, will help you survive and prosper.
- Most days will involve group activities, discussions and presentations.
- Students missing two consecutive days without notifying the instructor risk being dropped from the class.
- If you are late or miss a class, you will lose points.

There are no excused absences, but plenty of opportunities to make up points.

If you end up needing more makeup points, we can sort out ideas about make-up activities. Make-up activities are flexible; come up with something you would find valuable & then check it with me. We do have the default option of additional HW assignments, per check in with me.

#### Field Trips and Visitors

AS can be arranged, we will have Guest Speakers and Field Trips, goal of at least three. Students frequently find these visits and trips the most rewarding activity in the whole class. (modified, we are on Zoom, we hope to have guest lecturers via Zoom, and have had some great visits in the past!).

# **Individual Assignments**

All work will be turned in Via CANVAS.

Make sure you know how to use CANVAS and if you don't, ask your fellow students, and for SRJC support info.

The goals of the assignments are to expose you to resources, ideas, and information and GUIDE you in doing essential research about whether Engineering is for you, what kind you might like, how you can pay for it, etc.

All work you would need to do anyway and this way you get class credit!

I encourage you to adjust the assignments to what you would benefit from most (i.e. you are welcome to slant your assignments into your areas of interest.)

example: If you are dreaming of going to UCLA, perhaps pick that as your Oral or Homework assignment (Oral is only if not already selected by a prior student).

All assignments must be fully responsive to requested information, so read assignment carefully and address all items. Include URL or contact information on sources, people, or companies.

Points can be lost for being late (20 points) or for poor effort.

Generally, almost all students follow these common sense rules and get all their assignments checked off for full credit.

Earning "bonus" or "make-up" points is possible, but would not suggest relying on that, as if you have trouble getting the work done, you will have trouble getting even more work done!

#### **Oral Presentation: 220 points**

Each student in the class will make a short 5-minute presentation to the rest of the class.

- Sign-ups for the various topics and dates will be made on the second day of class.
- The topics are: a field of engineering, how something works, a local company, an engineering school, an engineer you interviewed, or an ethics scenario.

## Final Exam/Project: 240 points for your final.

• INVENTION PROJECT, either by yourself, or with small team.