ME189 & ECE188: Week 5

Course Timeline

Week 1	Class	Fabricating and testing

Week 2 Website Content In Fabricating and testing

Week 3 Fabricating and testing

Week 4 Fabricating and testing

Week 5 Class Project completion Test Plan Final prototype 1 completed

Course Timeline

Week 6	Reworking prototype and testing		
Week 7	Reworking prototype and testing		
Week 8	Project completion review	Reworking prototype and testing	
Week 9	Project completion review	Poster 1st Draft Due Tues 5pm	
	Poster reviews Thu/Fri 9am-12:30pm	Poster Final Draft Due Sat 5pm	
Week 10	Video Due Monday 5pm Poster Presentation rehearsals Wed/Thurs afternoon Showcase Presentation rehearsals Thurs 3-6pm Engineering Design Expo (Edx 2019) Fri 12:00-5:15pm		
Week 11	Lab clean-up, Final Design Packet, and data dump Tuesday 12pm Submit self/group evaluations by 5pm		

Engineering Design Expo (EDx 2019) Friday June 7th at Campbell Hall

- Open to the public
- Lots of potential employers
- Dress to impress

12:00 1:30 Fair Setup / Lunch / Class Picture

1:30 4:00 Design Fair

4:00 5:00 Showcase

5:00 5:15 Clean up



Design Competition

Competition Information

■ Time/Date: Fri, June 7th from 1:30-4pm (Arrive at 12pm for lunch, set-up, <u>class photos</u>)

Location: Corwin Pavilion

■ Format: Each team will have a booth with electrical power access, table, and their

poster. You will have a dedicated time to showcase your project to the judges

(12 minutes per EE team). If possible, you should work a demo of your

product into what you present. If applicable, you may have supplementary

props and/or a laptop with pictures, images, videos, but ABSOLUTELY NO

SLIDES! Judges will likely interrupt you with questions, so be prepared to

think on your feet!

■ Judging Criteria:

- 1. Quality of the engineering work and of the resulting final product.
- 2. How well were the goals of the project achieved?
- 3. Quality of presentation / demonstration.

Competition Information

- Projects will be judged by a panel of faculty and industry judges
- There will be three separate competitions:
 - Mechanical Engineering (4 awards)
 - Excellence in Mechanical Engineering (includes \$3K prize)
 - Engineering Innovation in ME (includes \$2K prize)
 - Best Technical Project in ME (includes \$2K prize)
 - Best Pitch may be added to other 3 awards (includes \$500 prize)
 - Electrical Engineering
 - Excellence in Electrical Engineering (includes \$3K prize)
 - Multidisciplinary
 - Excellence in Engineering (includes \$5K prize)

Poster Information / Overview

- Size: 36" x 48" (EE and Multidisciplinary), 30" x 40" (ME)
- Content: Refer to template and instructions. Note:
 - You may use provided template or come up with your own design
 - Must include (i) Team member names, (ii) Title, (iii) Your logo, (iv) Sponsor logo, (v) UCSB College of Engineering logo, and (vi) Acknowledgements
 - Background color cannot be black
 - Images must be at least 150dpi (preferably at least 300dpi)
- General Tips:
- Use a minimum of text (bullet point descriptions are encouraged)
- Make text large enough to be readable from a distance of 5 to 6 ft
- Use graphs, charts, photographs, and illustrations as much as possible
- Use graphics to communicate your points quickly and to demonstrate your work
- Ideal poster will serve both as a stand-alone poster and as a reference for your presentation

Example Insert project logo and Insert Poster Title Here only tagline here Student #2 | Student #3 | Student #4 | Student #5 Student #1 **Background Final Design / Product Name Key Result #1 (e.g., thermal** test, drop test, etc) Insert background info about your project, motivation, etc. Include a figure if applicable Example **Insert picture of Insert figure** final product only Overview / Design Specs Insert brief description of product, problems that it solves, bullet points of key features, etc Describe key result (consider bullet point list). Caption and/or text (preferably bullet points) **Hardware / Key Components** Key Result #2 / References / Conclusion Picture: Label Example Describe key component #1, including Key applicable specs Comp #1 **Exploded View / Block Diagram /** only **Functional Flow Diagram** Picture: Label **Insert figure** Describe key component #2, including applicable specs Comp #2 **Insert Exploded View / Template Block Diagram /** Picture: Label Describe key component #4, including Kev o be **Functional Flow Diagram** applicable specs Comp #3 Describe key result (consider bullet point list). oosted **Acknowledgements:** UC SANTA BARBARA **Sponsor** Acknowledge everyone that helped you with your project (sponsors, mentors, instructors, TA's, etc). College of Engineering Logo

Example only

Example only

Example only

Template to be posted

Poster Deadlines / Submission / Printing

- Tues 5/28: Submit first draft by 5pm, share over Google Drive to capstone.ece188@gmail.com
- Thurs 5/30 Fri 5/31: Poster reviews 9am-12:30pm
- Sat 6/2: Submit final draft by 5pm, share over Google Drive as above.
- Mon 6/4: All posters will be printed. Contact Ekta Prashnani (ektaprashnani@gmail.com) with questions
- Wed 6/5 & Thurs 6/6: Practice/info sessions at Campbell in the afternoon, times TBA

Project Completion Review / Customer Review (Final Presentation)

Project Completion Review

Content:

Tell us about your design

What motivated the design

Don't forget to include the design specifications which came from

Customer needs, Engineering Characteristics, competitive benchmarking

Show us the test results, how does your product stack up to the competition?

Get into the details of how your product works

Utilize video, pictures, diagrams

Design: Spend a few weeks really preparing for this review. Take pride in your story and design. Think about how to sell it!

Video due Mon June 3

Video for this year

One video will be shown at the design showcase at Campbell Hall

One video will be put on Vimeo and/or Youtube and the Capstone Website

Your choice:

Submit one 30 second video to be shown at the showcase and one 3 minute video for the website

Or

Submit one 30 second video for both

*If your team presents on stage, you need only submit one video. Can be anywhere from 30 seconds to 3 minutes.

30s Video specifics

To be shown in front of a crowd of 400-600 people

30 seconds max

Demonstrate your prototype working

Think of this as a commercial on television—sell us on your idea, why it's important

Condensed elevator pitch

Videos from last year: https://youtu.be/pjy1Wf9vFUI?t=1139

Data Dump

Data Dump

Box folder to be set up for your to dump all CAD files and everything else for the sponsor / future use