Ongoing Group Projects

BMES Cell Team
Winter 2020



Journal Clubs (Mandatory)

• **Directions:** Work in teams of 5-6 to arrange a Journal Club presentation.

Analyze a peer-reviewed article and create a presentation about it.

Sign up your group with this <u>link</u>.

- Requirements: Your article must be about a bioengineering-related field. However, you have plenty of subtopics to choose from:
 - Medical devices, pharmaceuticals, genetic engineering, microfluidics, etc.
 - We suggest using a paper published by a UCLA Lab so that you can use this as an opportunity to explore labs to join

Total presentation time should be at least 45 minutes.

 You may choose to fill some of that time by creating activities, posing discussion questions, or holding a Q&A session at the end.



3D Design Contest (Mandatory)

 Directions: Work in teams of 2-4 to design a 3D model using Computer Aided Design (CAD).

Popular programs include Autodesk Fusion 360 and SOLIDWORKS.

Your model could be anything:

Phone case, keychains, eyeglass frames, etc.

 Constraints: Your model cannot be any larger than 15cm x 15cm x 10cm.

All work must be original.

Incentives Winners will receive the following through mail:

- A 3D printed version of their model
- An additional prize

All participants will gain valuable engineering and CAD knowledge, which look great on resumes.



Downloading Autodesk Fusion 360



- 1. Go to https://www.autodesk.com/campaigns/education/fusion-360
- 2. Scroll down and click on "Get Fusion 360 For Free"
- 3. Under "Fusion 360," click on "Get Started"
- 4. Create an Education account with your ucla.edu email address
- 5. After creating your account, repeat steps 1-3 and click "Access"
- 6. Your download should start automatically

Notes:

Fusion 360 is a computer aided design software developed by Autodesk. Other popular programs developed by this company include TinkerCAD and AutoCAD. Fusion 360 is used to design 3D models and simulate them under physical phenomena.

Deadlines

• Journal Clubs Deadlines vary by group.

| Group 1 | Tuesday Week 7 |
|---------|--------------------|
| Group 2 | Thursday Week 7 |
| Group 3 | Thursday Week 9 |
| Group 4 | Spring Quarter TBD |
| Group 5 | Spring Quarter TBD |
| Group 6 | Spring Quarter TBD |
| | |

3D Design Contest will be due Monday of Week 9!

We suggest you get started on these NOW so that you don't have to worry about them during midterms season. Good Luck!