

AME 491: Undergraduate Design Projects: Solar Car

Faculty Advisor:	Dr. Emma Singer eksinger@usc.edu RRB 228
Fall 2023 meeting time:	TBD
Lab location:	Baum Family Maker Space
Organization website: Organization contact:	uscsolarcar.com uscsolarcar@gmail.com

AME 491 is a one-credit elective course allowing students to receive educational credit for participating in an undergraduate design team. Before enrolling in this class, it is strongly recommended that you spend at least a semester with the team to get a feel for the roles and expectations of this expansive project. This is at its essence a type of self-directed research and requires discipline and commitment to **participation**.

To receive credit for this class, the following objectives must be met:

Attend general & sub-team meetings

- General meetings with the faculty advisor are held once a week in the evening time currently TBD. These are usually in-person but may periodically be held over Zoom.
- Sub-team meetings are self-organized and are scheduled based on current projects and timelines. Participation in sub-teams requires a commitment to spending time in the lab.

Ownership of a project that furthers SC Solar Car's goals

- Choose a project idea (can be something new or based on observed needs from team experience) with the team & sub-team lead.
- Keep notes on the project's development & have regular check-ins with the faculty advisor.

- Be ready to periodically present presentation slides at general or subteam meetings to update the group on your project or solicit advice from your peers.
- Prepare a Google Doc for the end of the semester that documents the contribution to the team. This should include a short abstract that allows someone to quick-reference the work. The end goal is that this will live on in the team archives/Wiki and that your work can serve a purpose even as you move on from the team. Include what you did, why you did it, and any relevant references/sources that informed your choices.
- Learn something! While this bullet list may seem intimidating for someone working independently, this is just a guideline. It is inherently part of the process that some ideas will not pan out, which is okay. Work on scope control and think of something achievable in a single semester by a single person.

Be a good custodian of the shared Baum Family Maker Space

- <u>Attend safety training</u>. This is organized through BFMS and is required to enter.
- Learn the tools of the engineering trade! Spend time in lab to familiarize yourself with the team workspace, tools, and equipment.
- Be safe. If you think something looks like a bad idea, it probably is. Ask for help when needed that is what the space is for!

If you wish to enroll in AME 491 and "agree to the terms" above, please email E. Singer (eksinger@usc.edu) with your Student ID# to request D-Clearance.