

SYLLABUS

Course Number and Name: ME692 – Advanced Product Design II
Term: Spring 2025
Lecture: Monday/Wednesday, EPC B05, 2:30-4:15
Lab: EPC B05
Credits: 4. Engineering topic.
Number of Contact Hours: LAB – 1, LECTURE – 3
Instructor or Coordinator: Stephen Chomyszak
Office Hours: By Appointment
Textbook(s) and/or Other Required Material: None

Course Description: This course is a continuation of ME691, which ended with a full set of manufacturing drawings for a team selected product. ME692 continues the process with build and test phases using the same teams from ME691. There will be engineering/design reviews at various stages of the project which will require each team to prepare and deliver concise and succinct presentations of their work. Teams will incorporate feedback from each review back into their projects. The emphasis of ME692 will be placed on building successful prototypes (works like and looks like) of the products designed in ME691. Each team is encouraged to iterate on the process by breaking projects into smaller chunks starting with the highest risk aspects of their products and progressing towards the final prototype.

Semester Schedule:

Week	Topics
1	Review of projects and composition of teams.
2	Creation of a semester project plan for each product.
3	Develop Manufacturing Processes.
4	Begin creating hardware (and/or software) to establish product feasibility.
5	Refinement of hardware/software to further improve reliability & functionality.
6	Progress review – Are we on track to succeed? Class critiques.
7	Pivot or Proceed? Evaluating what to do next.
8	Semester Break – No classes – But keep working anyways!
9	Mid-Term Project Review and Peer Reviews.
10	Continue diving into details of the prototype.
11	Finish the prototype.
12	Begin user testing – are your customers happy with the results so far?
13	Incorporate customer feedback.
14	Final Product Testing.
15	Final Revisions to Prototypes and Drawings due.

NOTE: Instructor reserves the right to make alterations to the above schedule as needed.

Assignments and Grading Criteria

This course will be comprised of individual and team-based work. Evaluation of team-based work will be comprised of a final team grade given by the instructor for the overall quality of the work produced by the entire team AND will be prorated based upon a peer evaluation of each member's contribution to the team by all other members on the team. The peer evaluation will be agreed to and signed by all members on the team and will be used in the determination of an individual's team-based evaluation.

The breakdown for the grade weighting is:

Attendance	10%
Final Prototype and Revised Drawings	90%

Due to the importance of the team project, failure to participate in the project will result in a failing grade for the course.

Attendance Policy:

All students are expected to attend all lecture, labs, and events scheduled by their respective team. I will be taking attendance at all lectures and labs and I encourage team leaders to take attendance at their team meetings to provide meaningful data during the team's peer assessment.

Tracking of attendance will take the following format on a spreadsheet:

1.0 = Student is present and accounted for during scheduled class/lab time

0.5 = Student is not present but was proactive in communicating their absence to me via email

0.0 = Student not present and no prior notification given

A series of three 0's in a row will constitute a contact to the Department Chair to investigate the circumstances behind extended absences and to determine any administrative actions that should be taken as a result of the findings.

You can ask to see your attendance record for the class at any time.

I will be providing continuous input and feedback on your work throughout the semester and challenging your decisions in terms of the customer experience, the function of your product, the aesthetics of your product, the materials chosen for the prototype, and the methods used to make components for the prototype. Be prepared to justify your decisions.

Academic Conduct:

All students will be expected to follow Boston University's code for academic conduct found here: <https://www.bu.edu/academics/policies/academic-conduct-code/>