

IDP 250 Course Overview (Jan 2016)

Day	Times	Activity	Location
Tues, 1/19	9:00-9:30	Survey: Background with CAD Overview: Class intent and structure. Overview of project.	Bass 102
	9:30-11:00	Workshop: Intro to sketching and drafting	Bass 102
	11:15-Noon	Lab: Disassemble motors and select teams for reverse engineering some of the parts	Bass 102
	Noon-1:00	Break: Lunch	
	1:00-2:30	Lab: In teams, measure and draw up your assigned part.	Bass 102
	2:45-4:00	Lab: Individually design a new custom flywheel in CAD for your motor.	Bass 102
Wed, 1/20	9:00-9:20	Review: Check progress. Assign tasks and teams for the day.	CDF
	9:30 – 10:00	Lecture: Safety training	CDF
	10:00-Noon	Lab: Center for Design and Fabrication (CDF), work in teams making assigned parts.	CDF
	Noon-1:00	Break: Lunch	
	1:00-4:00	Lab: Center for Design and Fabrication (CDF), work in teams making assigned parts.	CDF
Thurs, 1/21	9:00-Noon	Lab: Continue fabricating parts. Reassign teams as needed.	CDF
	Noon-1:00	Break: Lunch	
	1:00-4:00	Lab: Continue fabrication. Each student make her custom flywheel.	CDF
Fri, 1/22	9:00-10:00	Review: Check status of all students progress. Lecture: Assembly drawings and BOM	Bass 102
	10:15-Noon	Lab: Assemble engines	CDF
	Noon-1:00	Break: Lunch	
	1:00-3:00	Lab: Finish Assembly	CDF
	3:00-4:00	Documentation: Prepare simple PPT slides to showcase work in project. Work in teams, include all documentation you created during the project.	MCCConnell 103
	6:00-8:00	Design Expo: Motor runoff contest! Photo opportunities, with dinner! Survey: Final course survey	McConnell 103

Learning Objectives:

- Learn how understanding fabrication enhances design ability.
- Learn how to detail and communicate design intent.
- Increase understanding of basic materials and manufacturing processes.
- Complete a physical model, and design documentation for it.

Grading: Class is graded S/U. Passing assumes a completed prototype plus relevant documentation. Students are expected to attend at least 80% of the class time.