Project 3



Project 3 tasks are arranged into four modules: (0) an introduction to SolidWorks; (1) creating the ball valve assembly; (2) printing the ball valve; and (3) running a CFD simulation.

Except for **Prob. 1d**, the tasks may be split amongst group members and completed in any order.

Upload deliverable files with the below names (i.e., do NOT include group #) to Canvas as one group submission, and submit the 3D printed assembly in class on the due date.

Prob.	Assignment	Deliverables	
0	Watch <u>SolidWorks - Intro Tutorial</u> (https://usflearn.instructure.com/courses/1149737/external_tools/26376).	none	
1a	Complete SolidWorks - ball.SLDPRT (https://usflearn.instructure.com/courses/1149737/external_tools/26376). Dimensions can be found in ball.PDF	ball.SLDPRT	
1b	Complete SolidWorks - side.SLDPRT (https://usflearn.instructure.com/courses/1149737/external_tools/26376)	side.SLDPRT	
1c	Complete SolidWorks - handle.SLDPRT (https://usflearn.instructure.com/courses/1149737/external_tools/26376)	handle.SLDPRT	
1d	Complete SolidWorks - ball valve.SLDASM (https://usflearn.instructure.com/courses/1149737/external_tools/26376) .	ball valve.SLDASM	
2	Complete SolidWorks - 3D Printing (https://usflearn.instructure.com/courses/1149737/external_tools/26376), print each part, and assemble them. Note: Printing is free in the DfX Lab but should be done ASAP due to printer availability. If you are unable to secure a printer in the DfX Lab, you will need to print at the Advanced Visualization Center at your own expense (\$0.06/gram).	3D Printed Ball Valve	
3	Download the A1 - Ball Valve folder from your Project 3 Materials. Complete SolidWorks FlowSim Tutorial.pdf and pload the folder as a ZIP file.	A1 - Ball Valve.zip	

Note: Go to Tools > Add-Ins... > SolidWorks Flow Simulation 201# to activate.

Points 50

Submitting a file upload

Due	For	Available from	Until
Nov 29, 2016 at 9:30am	Everyone	-	-

