

Meeting #15 Agenda, 12/8/20

- Discuss Course Deliverables this Friday, 12/11/20
 - Portfolio
 - Wikipage
 - Logbook Check
- Prototyping Update
 - 3D printing progress
- Prototyping Tooltip/Brainstorming
 - How will we attach our shaving platforms to our fabricated linear actuation fork?
 - Threads with locking mechanism?
 - Failure points

Team Meeting #15 Minutes, 12/8/20

- Portfolio Check
 - Maclean will add project learning and submit for check on Friday
 - Ryan will update the schedule a bit
 - Jett will update the project validation plan
- Wikipage Check
 - Lucas will update with the information Dr. Hiller provided regarding use of his name and quotes, and submit on Friday
- Logbook Check Reminder
- 3D Printing Update
 - Jett will go get electronics from Dr. Perry tomorrow at 3p
 - Parts should be done printing by Friday or Saturday at the latest and ready for assembly
 - Jett will assemble the circuit for the testbed prototype
- Output Shaft brainstorming
 - Shear pin inside of the handle could act as a useful built-in failure point
 - Carbon fiber reinforcement for parts that we 3D print will need at least 3.5mm thickness
 - Tooltips should be attached to output shaft, so that each shaft is swapped out when a new tip is needed
 - Access to inside of handle could be accomplished via toolbox clips
 - Handle would be split into two halves for easy disassembly and autoclaving
 - It could be useful to house electronics in a separate removable compartment for easy removal and autoclaving
 - Magnets could hold together halves of testbeds or prototypes
- Lucas created the old actuation fork design at a 120 degree angle for solenoids mounted on the sides of the device, Ryan straightened fork to 180 degrees and put solenoid mounts on top and bottom of receiver
 - 120 degree angle was created for shaft stability
 - In the future we could use a ball-bearing to actuate the shaft to reduce friction and heat generation
- Action Items
 - Jett- Get parts from Dr. Perry tomorrow, update validation plan, and assemble circuit testbed when ready, update portfolio minutes
 - Maclean- Update and submit portfolio, specifically project learning
 - Lucas- Update and submit Wikipage
 - Ryan- Update project budget/schedule for portfolio check