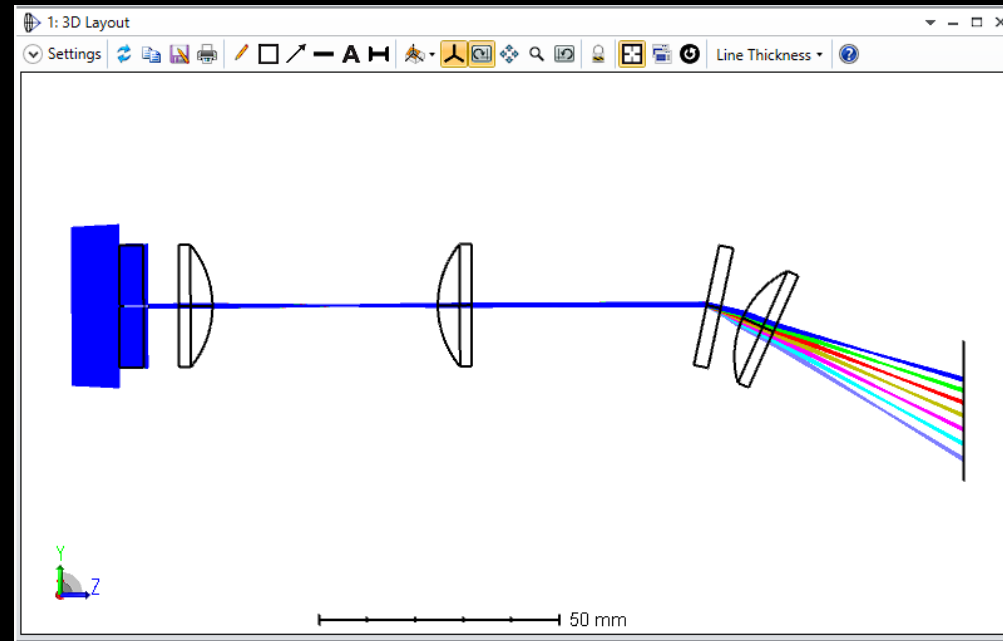# Spectral Forest
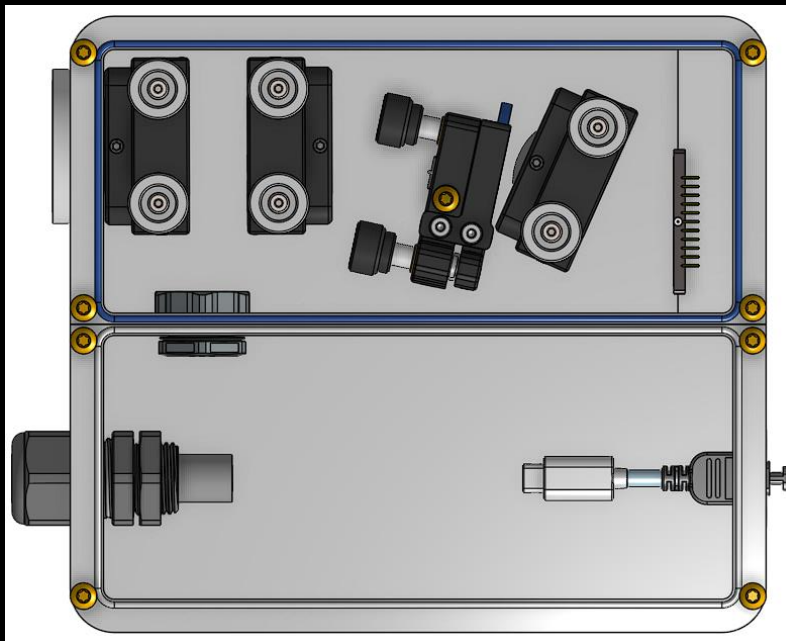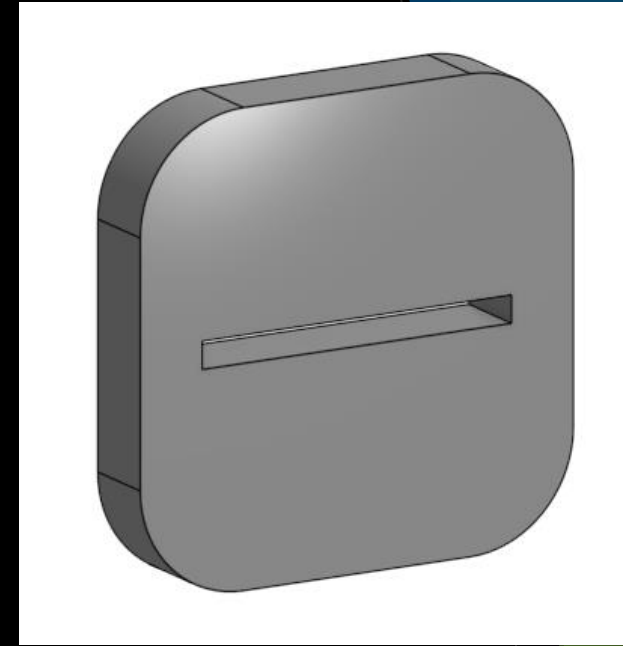## Hardware Status Update – 33% build

ME 486C Section 01

Team: Tyler Lerew, Torrey King, & Derrick Doan

Design Effort
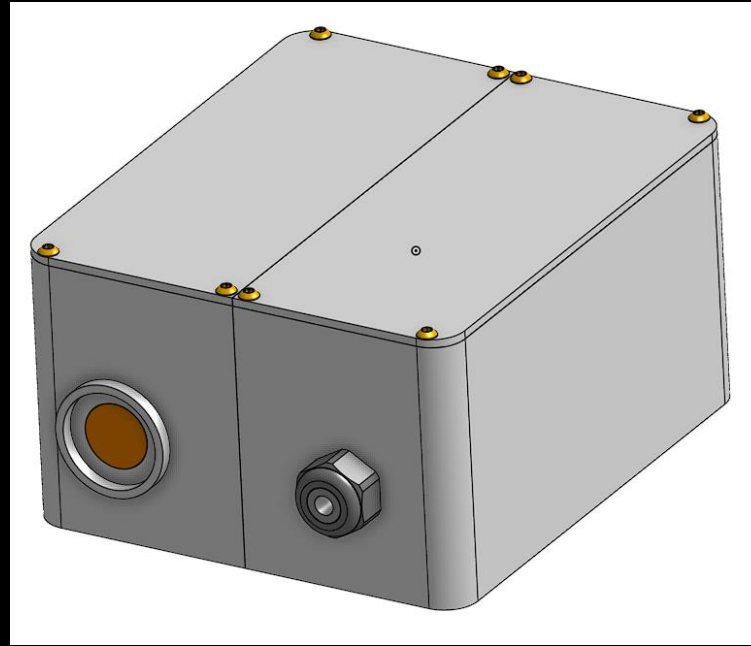
Iterations
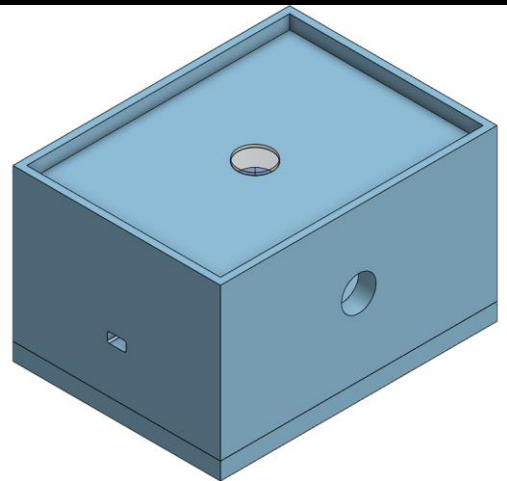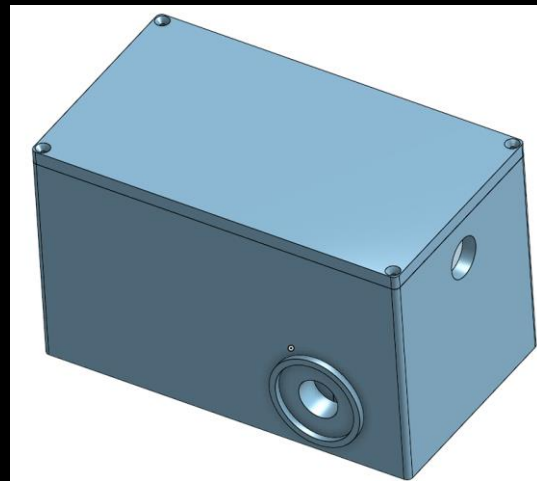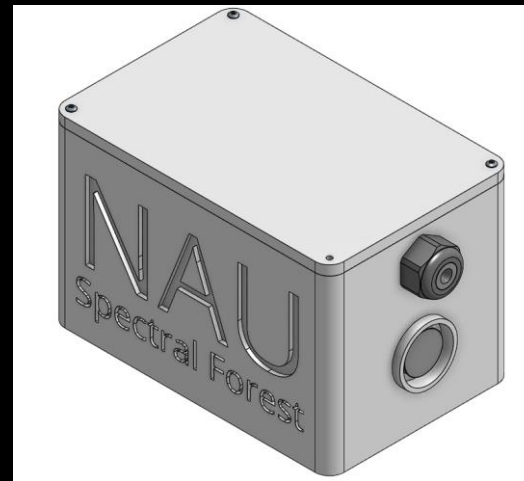
1st & 2nd 3rd 4th 5th
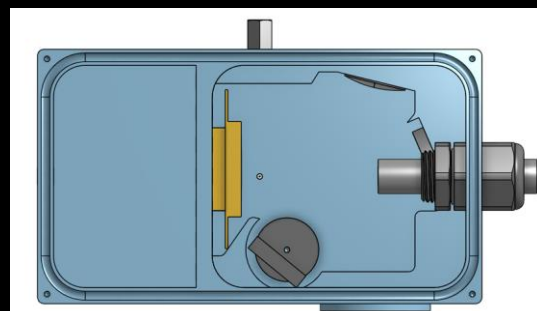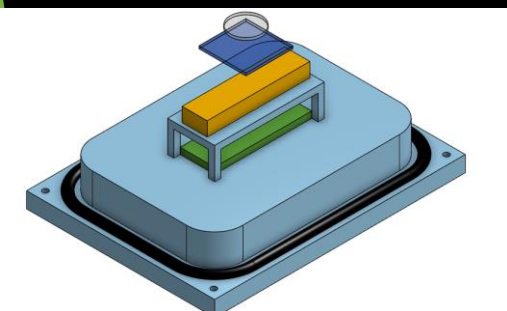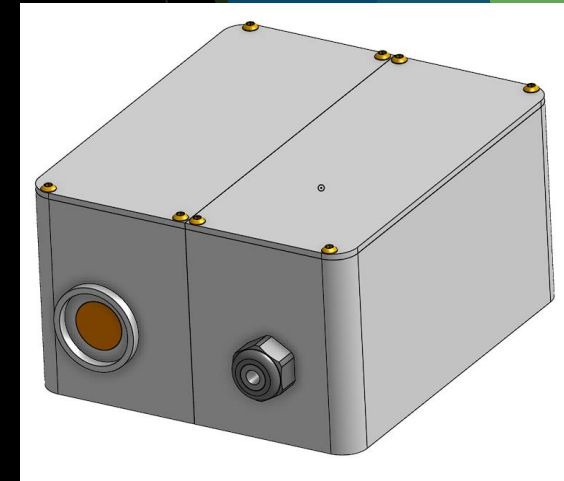
Purchasing Plan

- Everything will be sent off to be purchased this week

- BOM is finalized excluding calibration materials

- We have 22% of our items purchased and on hand, 78% yet to be purchased: printed housing, screws, screw inserts, and drone nut

- Switching tabs to view BOM for your viewing pleasure

Manufacturing Plan

▶ We will be purchasing a Bambu Lab X1C 3D printer to print all our prototypes, and the final design ourselves

▶ We have not manufactured anything yet, once the printer is purchased and arrives, we will begin printing more prototypes to do testing and modifying our mounts to decrease weight

| Bill of Materials: Manufactured Items								
Item #	Item	Item Description	Vendor & Part #	Quantity	Cost $	Cost Per unit $	Purchase or Manufacture	Weight [oz]
1	Final 3D printed device	Will house all internal components	In house	1	N/A	N/A	Manufacture	
2	Prototype device #2	Will be used for testing purposes	In house	1	N/A	N/A	Manufacture	
3	Prototype device #3	Will be used for testing purposes	In house	1	N/A	N/A	Manufacture	
4	Prototype device #4	Will be used for testing purposes	In house	1	N/A	N/A	Manufacture	
5	Prototype device #5	Will be used for testing purposes	In house	1	N/A	N/A	Manufacture	

Demo: Pictures of 3D Printed Housing
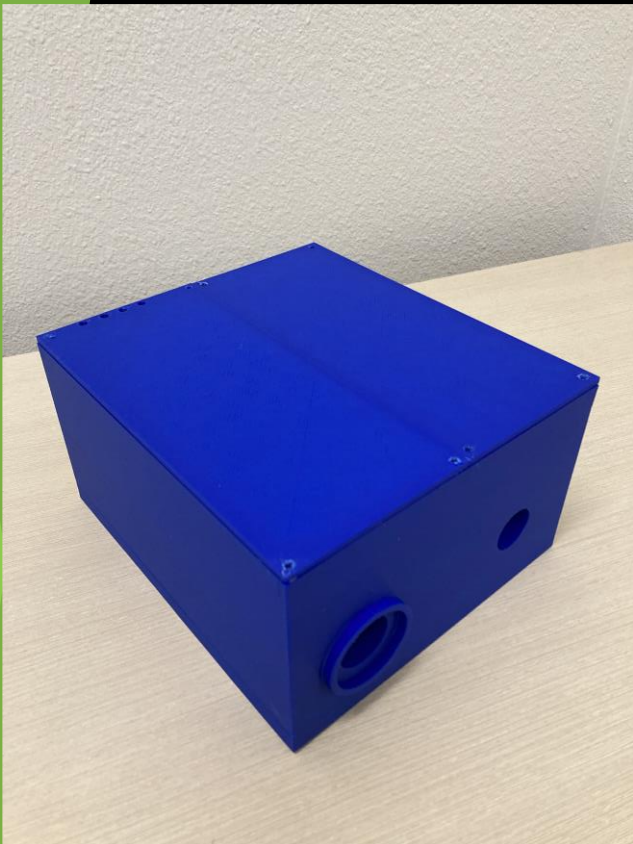
Demo: Pictures of Misc. Hardware

Gantt Chart

▶ On or ahead of schedule depending on the swiftness of the delivery of our items

▶ Only roadblock is the weight so we will be drilling holes in our mounts to decrease weight

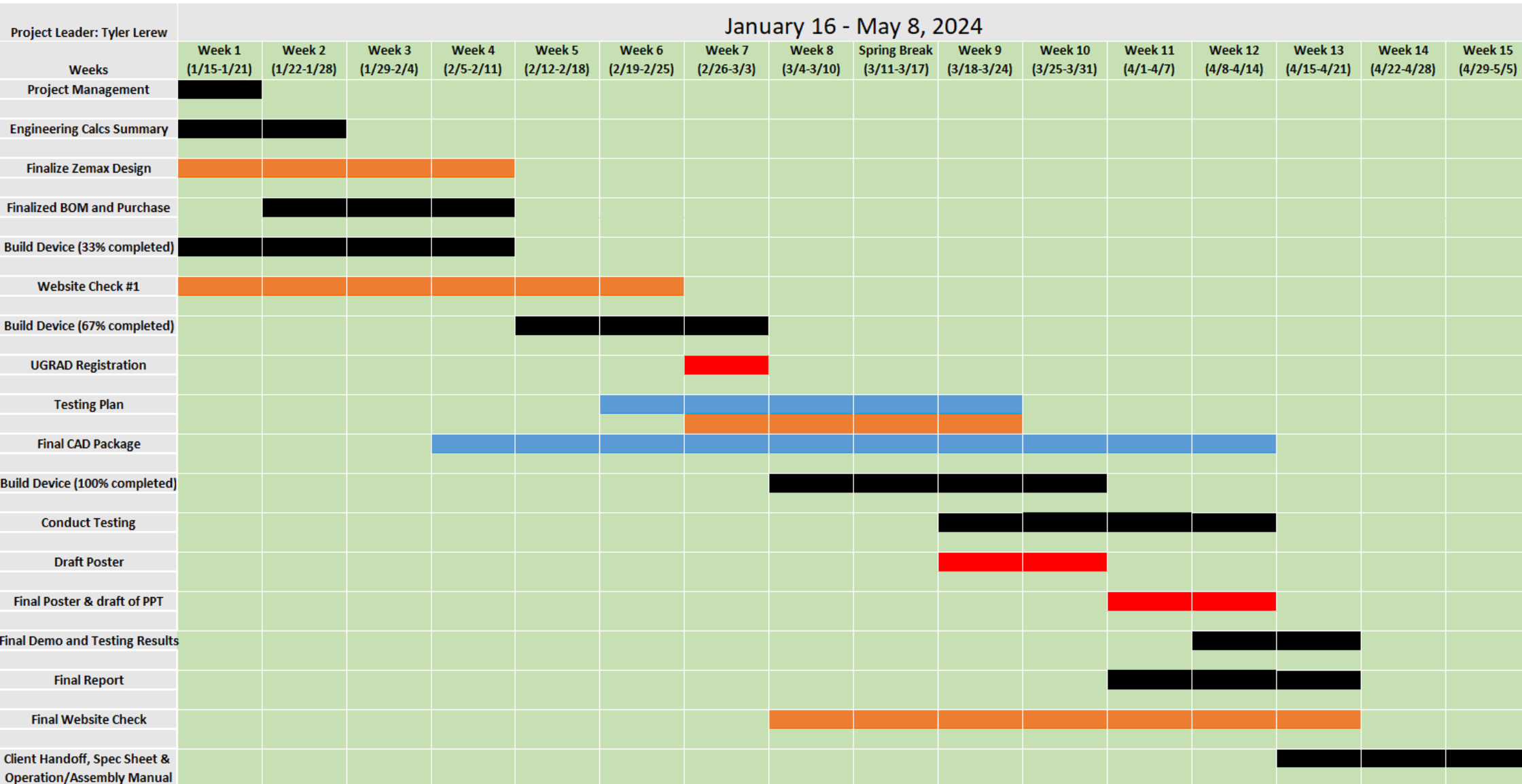## Spectral Forest Gantt Chart

Project Leader: Tyler Lerew

Weeks	Week 1 (1/15-1/21)	Week 2 (1/22-1/28)	Week 3 (1/29-2/4)	Week 4 (2/5-2/11)	Week 5 (2/12-2/18)	Week 6 (2/19-2/25)	Week 7 (2/26-3/3)	Week 8 (3/4-3/10)	Spring Break (3/11-3/17)	Week 9 (3/18-3/24)	Week 10 (3/25-3/31)	Week 11 (4/1-4/7)	Week 12 (4/8-4/14)	Week 13 (4/15-4/21)	Week 14 (4/22-4/28)	Week 15 (4/29-5/5)
Project Management	██															
Engineering Calcs Summary	██	██														
Finalize Zemax Design	██	██	██	██												
Finalized BOM and Purchase		██	██	██												
Build Device (33% completed)	██	██	██	██												
Website Check #1	██	██	██	██	██	██										
Build Device (67% completed)					██	██	██									
UGRAD Registration							██									
Testing Plan						██	██	██	██	██						
Final CAD Package				██	██	██	██	██	██	██	██	██	██			
Build Device (100% completed)								██	██	██	██					
Conduct Testing										██	██	██	██			
Draft Poster									██	██						
Final Poster & draft of PPT											██	██				
Final Demo and Testing Results													██	██		
Final Report										██	██	██				
Final Website Check								██	██	██	██	██	██			
Client Handoff, Spec Sheet & Operation/Assembly Manual														██	██	██

Derrick Doan	🟧
Torrey King	🟧
Tyler Lerew	🟦
Everyone	⬛
All UGRAD	🟥

Thank you!

Questions?