MEETING MINUTES

Topic: Individual Analytical Assignments

Friday, September 21, 2018
12:15 pm – 1:00 pm

Minutes recorded by _Jacob Barker_____

Meeting called by _Jacob Barker_____

Attendees: __Jacob Barker, Samm Metcalfe, Ashley Shumaker____

Please bring: _Ideas for Individual Analytical Assignments_____

Table 1. Record of meeting.

12:15 pm to end	**Met to discuss/brainstorm ideas for individual analyses**
	
	Came up with the following ideas
	
	● 3D Printed Material Analysis
	  ○ explore different materials/properties
	  ○ Tensile strength
	  ○ Melting/glass transition temp
	● Shaft analysis
	  ○ weight/moment of inertia/torque
	  ▪ old team shaft vs proposed design
	  ○ Aluminum vs steel, hollow vs. solid
	● Air compressor analysis
	  ○ tank decompression
	  ○ how to make tank last longer (currently only lasts ~30-45 sec)
	● LabVIEW Calibration/Data Acquisition
	  ○ not sure this would work as an analytical assignment
	● Sensor analysis
	  ○ sensor cost, accuracy, output voltages for thermocouples/transducers
	  ○ again, may not be good analytical
	● Heating pre-chamber heat-transfer analysis
	  ○ similar analysis was done in first semester, but this would be more tailored to current design
	● Simple Brayton Cycle analysis/estimate for system
		3rd Floor Study Area

	○ team hasn't used much thermo knowledge so far in project ○ would require a lot of educated guesses, don't have much data to go off of yet ● **Combustion chamber air diffuser design** ○ Dyson fan as inspiration ● **Email Dr Oman/Amy for feedback on what they would like to see**	