



Aerospace Studies I (Junior Year)
Year at a Glance (YAG)
2022-2023



First Semester		Second Semester	
1 st Nine Weeks – 40 days		3 rd Nine Weeks – 45 days	
<p><u>TEKS</u></p> <p>1A, 1B, 2A-2G, 2J, 2K, 3B, 3D, 3D, 4B, 4D, 4E, 5A-5I, 6A-6F, 6I,</p>	<p>Advanced Tech</p> <p>Energy</p> <p>Force Vectors</p> <p>Impulse Momentum Theory</p> <p>Torque and Mechanical Stress</p> <p>Newton's Physics</p> <p>Safety</p> <p>Gen 1 Rocket Development</p> <p>Flight Stability</p> <p>Gen 2 Rocket Development</p> <p>Thrust to Weight Ratio</p>	<p><u>TEKS</u></p> <p>A, 1B, 2A-2G, 2J, 2K, 3B, 3D, 3D, 4B, 4D, 4E, 5A-5I, 6A-6F, 6I,</p>	<p>Dimensional Analysis</p> <p>Fluids: Archimedes, Bernoulli</p> <p>Dimensional Analysis</p> <p>Fluids: Archimedes, Bernoulli</p> <p>Intro to Modeling RockSim</p> <p>Gen 3 Design</p> <p>Electricity in a System</p> <p>Thermal Energy Systems</p> <p>Work</p> <p>Power</p>
2 nd Nine Weeks – 43 days		4 th Nine Weeks – 45 days	
<p><u>TEKS</u></p> <p>1A, 1B, 2A-2G, 2I, 2J, 2K, 3B-3F, 4B, 5A-5I, 6A-6C, 6E, 6F, 6H, 6I,</p>	<p>Problem Analysis/Design Theory</p> <p>All-up Vehicle Design</p> <p>All-up Vehicle Design/flight profile with thrust curve</p> <p>Component team design/research</p> <p>Material Research</p> <p>Critical Design Review</p> <p>Material Acquisition</p>	<p><u>TEKS</u></p> <p>1A, 1B, 2A-2G, 2I, 2J, 2K, 3B-3F, 4B, 5A-5I, 6A-6C, 6E, 6F, 6H, 6I,</p>	<p>Component Fabrication</p> <p>All-up Configuration of Vehicle</p> <p>Flight Readiness Review</p> <p>Standard Operating Procedures/Safety Analysis</p> <p>Test Preparation and Test</p> <p>Post Mission Analysis</p> <p>Post Mission Analysis Final Report</p> <p>Final Report</p>

Resources

1st Nine Weeks	2nd Nine Weeks	3rd Nine Weeks	4th Nine Weeks
----------------	----------------	----------------	----------------



Aerospace Studies I (Junior Year)
Year at a Glance (YAG)
2022-2023



SystemsGo	SystemsGo	SystemsGo	SystemsGo
-----------	-----------	-----------	-----------