

**Sophomore Clinic I – Fall 2008  
Grading Criteria for Assignment 1: Design Report on Rocket Project**

<b>Executive summary and conclusions</b>	50	
<ul style="list-style-type: none"> <li>▪ Conveys key information regarding the project goal, the design approach, and the design solution in the <b>executive summary</b> <ul style="list-style-type: none"> <li>○ Explains goal of project in terms of optimization, not simply farthest distance</li> <li>○ Explains approach to optimization</li> <li>○ Provides performance results</li> <li>○ Characterizes success of design solution in terms of a relevant measure of success</li> <li>○ Omits specifications of design solution</li> </ul> </li> <li>▪ Summarizes and evaluates performance results in the <b>conclusions</b> <ul style="list-style-type: none"> <li>○ Summarizes optimization</li> <li>○ Provides a quantitative comparison of final performance to predictions based on previous experiments</li> <li>○ Evaluates quality of the final design instance</li> <li>○ Provides a quantitative comparison of the final design to other instances that were tested</li> <li>○ Discusses the relative importance of the three parameters in the context of repeatability of the test launches</li> </ul> </li> </ul>		
<b>Graphic presentation of technical information</b>	50	
<ul style="list-style-type: none"> <li>▪ Uses figures effectively to highlight features of the <b>design solution</b> <ul style="list-style-type: none"> <li>○ Produces neatly drawn or computer-generated figures to scale</li> <li>○ Provides a complete diagram of the final rocket design with key components labeled and dimensions indicated</li> <li>○ Graphically defines the family of fins that was evaluated, identifying the parameter as well as key features, dimensions, and constraints</li> <li>○ Includes concise, informative captions and labels as appropriate that allow figures to be interpreted independently of the report text</li> <li>○ Refers to figures in the <b>executive summary</b> and/or <b>conclusions</b> as appropriate</li> </ul> </li> <li>▪ Uses figures effectively to show data that informed <b>design optimization</b> <ul style="list-style-type: none"> <li>○ Constructs graphs to maximize readability</li> <li>○ Identifies parameters, including which were held constant and which were varied</li> <li>○ Presents data in appropriate graphic form to illustrate optimization strategy and key decisions</li> <li>○ Includes concise, informative captions or titles as appropriate that allow figures to be interpreted independently of the report text</li> <li>○ Refers to figures in the <b>executive summary</b> and/or <b>conclusions</b> as appropriate</li> </ul> </li> </ul>		
<b>Total (20% of final report grade)</b>	<b>100</b>	