

**String Instrument  
Final Project Grading Rubric**

Criteria	<b>← Achievement →</b>		
↓	<b>Meets or Exceeds Expectations 80% - 100%</b>	<b>Approaching Expectations 70% - 79%</b>	<b>Below Expectations 69.9% or less</b>
String Instrument (Whole group grade)	<ul style="list-style-type: none"> <li>- The instrument shows logical modification from its 1<sup>st</sup> iteration</li> <li>- Instrument has a functional tuning mechanism, 1-6 strings, and 12 or more frets</li> <li>- The frets have been placed in accordance with the mathematical model developed by the team</li> <li>- Overall appearance of the instrument shows great attention to detail</li> <li>- The instrument has evolved from sketches and digital renderings; has been built to the specifications of drawings, and is pleasing to the eye</li> </ul>	<ul style="list-style-type: none"> <li>- Instrument has somewhat been modified from its 1<sup>st</sup> iteration</li> <li>- Instrument has a tuning mechanism that is nonfunctional, 1-6 strings, and 8-12 frets</li> <li>- The frets have been placed within a quarter inch of where the mathematical model developed by the team suggests</li> <li>- Overall appearance of the instrument shows attention to detail</li> <li>- The instrument has somewhat evolved from sketches and digital renderings; has been built close to the specifications of drawings, and is pleasing to the eye</li> </ul>	<ul style="list-style-type: none"> <li>- Instrument has minimally been modified from its 1<sup>st</sup> iteration</li> <li>- Instrument does not have a tuning mechanism, 1-6 strings, and or less than 8 frets</li> <li>- The frets have been placed more than a quarter of an inch away from where the mathematical model developed by the team suggests</li> <li>- Overall appearance of the instrument lacks attention to detail</li> <li>- The instrument shows very little evidence of having evolved from sketches and digital renderings; instrument appears very rough</li> </ul>

<p>Reflection (Individual grade)</p>	<ul style="list-style-type: none"> <li>- Individual reflection is 1.5 – 2 pages typed (d.s.) or hand written or its recorded duration is 4-5 minutes</li> <li>- Reflection delves into instrument's strengths, growth areas, &amp; potential improvements and the experience of working on a team</li> </ul>	<ul style="list-style-type: none"> <li>- Individual reflection is between 1 and 1.5 pages typed (d.s.) or hand written or its recorded duration is 3-4 minutes</li> <li>- Reflection delves into most of the following: instrument's strengths, growth areas &amp; potential improvements and the experience of working on a team</li> </ul>	<ul style="list-style-type: none"> <li>- Individual reflection is less than a page typed (d.s.) or hand written or its recorded duration is less than 3 minutes</li> <li>- Reflection delves into little of the following: instrument's strengths, growth areas &amp; potential improvements and the experience of working on a team</li> </ul>
<p>Materials Team Member (Individual grade)</p>	<ul style="list-style-type: none"> <li>- Choice in materials was highly logical</li> <li>- Requests for materials were prompt and outlined their price and store location</li> </ul>	<ul style="list-style-type: none"> <li>- Choice in materials was somewhat logical</li> <li>- Requests for materials were provided late yet outlined their price and store location</li> </ul>	<ul style="list-style-type: none"> <li>- Choice in materials was illogical</li> <li>- Requests for materials were not provided or did not outline their price and store location</li> </ul>
<p>Schematics Team Member (Individual grade)</p>	<ul style="list-style-type: none"> <li>- Team includes four to six detailed drawings and two robust digital rendering</li> <li>- Printouts of digital renderings were taken from three perspectives</li> </ul>	<ul style="list-style-type: none"> <li>- Team includes three to four detailed drawings and two digital rendering</li> <li>- Printouts of digital renderings were taken from more than one perspective</li> </ul>	<ul style="list-style-type: none"> <li>- Team includes zero to three drawings and one or two digital rendering but they lacked detail</li> <li>- Printouts of digital renderings were taken from one perspective only</li> </ul>
<p>Coordinator Team Member (Individual grade)</p>	<ul style="list-style-type: none"> <li>- The coordinator clearly gave directives to his or her team members throughout the process</li> </ul>	<ul style="list-style-type: none"> <li>- The coordinator gave directives to his or her team members throughout the process</li> </ul>	<ul style="list-style-type: none"> <li>- The coordinator gave directives to his or her team members rather infrequently or erratically</li> </ul>

	<ul style="list-style-type: none"> <li>- The coordinator used nonviolent communication throughout the process and communicated clearly and respectfully with outside experts and the teacher</li> <li>- Synthesis of team members' thoughts was clear and thorough</li> </ul>	<ul style="list-style-type: none"> <li>- The coordinator primarily nonviolent communication throughout the process and usually communicated clearly and respectfully with outside experts and the teacher</li> <li>- Synthesis of team members' thoughts was incomplete</li> </ul>	<ul style="list-style-type: none"> <li>- The coordinator expressed needs rather violently and rarely communicated clearly and respectfully with outside experts and the teacher</li> <li>- Synthesis of team members' thoughts was not made or attempted</li> </ul>
Recorder/Photographer Team Member (Individual grade)	<ul style="list-style-type: none"> <li>- Thorough notes, observations, and mathematical calculations have been organized into a portfolio that document the build process and outline the final product</li> </ul>	<ul style="list-style-type: none"> <li>- Somewhat thorough notes, observations, and mathematical calculations have been organized into a portfolio that document the build process and outline the final product</li> </ul>	<ul style="list-style-type: none"> <li>- Notes, observations, and mathematical calculations that document the build process and outline the final product were sparse; portfolio of work is messy and incomplete</li> </ul>
Presentation of Project (graded under the 'Formal Critique' assessment)	X	X	X