

P1.1.6 Project Compound Scoring Rubric

Score:	/90 Points Total

Team Documentation				
Topics	6 points	4 points	2 points	1 point
Professional Appearance/Neatness	Includes all required sections; includes page numbers and appropriate section headings. Font and spacing choices are appropriate and consistent throughout document.	Includes most required sections; includes page numbers and appropriate section headings. Font and spacing choices are appropriate.	Does not include all required sections; includes page numbers; section headings could have been better organized. Font and spacing choices not appropriate.	Missing many sections; does not have page numbers or section headings. Lack of care put into layout and organization.
Title Page	Includes all components required for a complete title page. (Project #, title, & subtitle. team photo with final prototype. Designers, class name & period, date range of project with year.)	Includes 80% or more of the necessary components for a complete title page.	Includes 60% or more of the necessary components for a complete title page.	Includes 50% or more of the necessary components for a complete title page.
Table of Contents	Includes all major and sub headings as needed, and the corresponding page numbers.	Is missing some major and sub headings and the corresponding page numbers.	Is missing many major and sub headings and the corresponding page numbers.	Is missing most major and sub headings and the corresponding page numbers.
Design Brief	Includes <u>all parts of a design brief</u> organized into one page. Clearly details the Design problem, constraints, and Deliverables.	Includes all parts of a design brief organized into one page.	Includes most parts of a design brief organized into one page.	Includes some parts of a design brief organized into one page.
Proposed Design Solution	Proposed solution is accurately portrayed as high-quality sketch . Meets the required design concepts. Is properly detailed for effective communication, including labels, descriptions, signatures, and dates.	Produces marginally sufficient sketches that meet the required design concepts. Is properly detailed for effective communication, including labels, descriptions, signatures, and dates.	Produces sketches that are difficult to visualize. Lacks details in sketches. Missing some details for effective communication, including labels, descriptions, signatures, and dates.	Produces incomplete sketches. Does not present the concept well. Missing several details for effective communication, including labels, descriptions, signatures, and dates.
Design Modifications	All changes made to the original design solution are clearly communicated through sketches/photos and explanations. Sketches/photos include labels, signatures, and dates.	Most changes made to the original design solution are somewhat clearly communicated through a sketches and explanations. Sketches include labels, signatures, and dates.	Some changes made to the original design solution are poorly communicated through a sketches and explanations. Sketches include labels, signatures, and dates.	Few changes made to the original design solution are poorly communicated through a sketches and explanations. Sketches missing most labels, signatures, and dates.
Final Design Solution (annotated pictures & paragraph description)	Multiple views used to clearly highlight all physical aspects of the machine. All are properly detailed for effective communication, including labels and detailed descriptions. Organized on page(s) neatly. Includes paragraph description of final design clearly explains functionality of prototype and mechanical advantage.	Multiple views used to highlight physical aspects of the machine. Is detailed for effective communication, including labels and descriptions. Organized on page(s) neatly. Paragraph description of final design explains functionality of prototype and mechanical advantage.	Multiple views used to highlight physical aspects of the machine. Is detailed, including labels and descriptions. Paragraph description of final design is not included.	Single view used to highlight physical aspects of the machine. Includes labels and descriptions. Paragraph description of final design is not included.

	6 points	4 points	2 points	1 point
Teamwork		•	-	•
Group Interaction	All members are on task at all times and contribute in a positive manner. Gantt chart is created at the beginning of the project and updated often to reflect actual work done each work day. Tasks are divided equally amongst members and each person completes what is required of them.	Most members are on task at all times and contribute in a positive manner. Gantt chart is created at the beginning of the project. Tasks are divided equally amongst members and each person completes what is required of them.	Most members are on task sometimes and contribute in a positive manner. Tasks are divided equally amongst members and each person completes what is required of them.	Some members are off task at times and do not contribute in a positive manner. Evident that some members are not contributing and relying on others to complete what is required of them.
Solution Performance				
Design Requirements	Fully meets design requirements.	Meets most design requirements and supports the design function.	Meets some requirements but not enough to support the design function.	Does not meet any requirements.
Quality	Mechanisms are well built, and the chosen parts are appropriate.	Mechanism functions most of the time, and the chosen parts are appropriate.	Mechanism sometimes functions, and the parts are not chosen appropriately.	Mechanism rarely functions, and the parts are not chosen appropriately.
Functionality	Functions correctly and in a consistent manner.	Functions correctly and in a mostly consistent manner.	Malfunctions at times	Works correctly rarely.
Individual Deliverables				
Design Brief & Brainstorming Ideas	Design brief, team norms and consequences recorded neatly. Produces at least 2 viable and accurate pictorial sketches of the required design concepts. Each is properly detailed for effective communication, including dates, signatures, labels, and descriptions.	Design brief, team norms and consequences recorded neatly. Produces at least 1 marginally sufficient and accurate pictorial sketches. Each is marginally detailed for effective communication, including dates, signatures, labels, and descriptions	Produces sketches or electronic 3D models that are difficult to visualize. Lacks details in sketches.	Produces incomplete sketches or electronic 3D models. Does not present concept.
Mechanism Calculations	Mechanism is clearly identifiable as one that manipulates force or distance. Mechanical advantage and/or ratio is neatly & accurately calculated, with all data & work shown (including formulas).	Mechanism is identifiable as one that manipulates force or distance. Mechanical advantage and/or ratio is calculated but not very accurately.	Mechanism is marginally identifiable as one that manipulates force or distance. Mechanical advantage and/or ratio is calculated but not very accurately.	Mechanism is difficult to identify as one that manipulates force or distance. Mechanical advantage and/or ratio is not calculated.
Project Log	Provides an accurate description of tasks completed each day with specific details about personal contributions to the project. Complete sentences used.	Provides an accurate description of tasks completed each day with some details about personal contributions to the project.	Provides a description of tasks completed each day.	Provides a description of tasks completed in the project.
Conclusion Questions	All questions answered thoroughly and correctly with full explanation demonstrating mastery of concepts learned.	All questions answered correctly with explanation demonstrating concepts learned.	All questions answered but incorrectly or lacking explanation demonstrating concepts learned.	Not all questions answered.