

highlighted = scored individually

4.4 Miniature Train Project Rubric



Score _____/135 points

Teamwork [35 points]

Elements	5 Points	4 Points	3 Points	2 Points	0 Points	Total
Group Responsibilities	Group Responsibilities Form completed. Gantt chart created neatly and organized for ease of use. Team responsibilities are divided equally and fairly, representing accurately each person's role in the project. Gantt Chart updated to reflect actual work done each day.	Group Responsibilities Form completed. Gantt chart created neatly. Team responsibilities represent accurately each person's role in the project. Gantt Chart updated to reflect actual work done each day.	Group Responsibilities Form completed. Gantt chart created. Gantt Chart updated to reflect actual work done each day.	Group Responsibilities Form completed. Gantt chart created.	This part was not done.	
Group Interaction	All members are on task at all times and contribute in a positive manner. Members settle disputes productively and respect each other at all times.	Most members are on task at all times and contribute in a positive manner. Members settle disputes productively.	Most members are on task some times and contribute in a mostly positive manner. Members are able to settle disputes.	Some members are off task and do not contribute in a positive manner. Members are unable to settle disputes productively disrespectful at all times.	This part was not done.	
Evaluations	5 points earned for honest completion of evaluations (self & each team member)	20 points earned from average value of team evaluations (value x 2)				

Parts 2-5: Inventor Files [45 points]

Elements	5 Points	4 Points	3 Points	2 Points	0 Points	Total
Electronic File Organization	All files saved under the correct format and name. File folders organized in Google Drive IED_LastName folder. Unnecessary files removed or archived into another folder.	Most files saved under the correct format and name. File folders organized in Google Drive IED_LastName folder. Unnecessary files removed or archived into another folder.	Some files saved under the correct format. File folders are in Google Drive IED_LastName folder.	Few files saved under the correct format. File folders are in Google Drive IED_LastName folder, but difficult to find because poorly organized. .	Files missing from IED folder.	
Parts (x 2)	All parts are modeled with attention to detail and precision. All parts are dimensioned fully and accurately.	All parts are modeled with attention to detail. All parts are dimensioned and accurately.	All parts are modeled and dimensioned.	All parts are modeled.	Parts of the car are missing or modeled within a single part.	
Full Train Assembly (x1)	Assembly is done correctly so that the cars move together on the track. All parts fit together accurately.	Assembly is done correctly so that there are no remaining degrees of freedom on parts that are immobile. Most parts fit together accurately.	The assembly is complete but constraints may be missing or improperly done.	The assembly is incomplete and improperly constrained.	This part was not done.	
Exploded Assembly Presentation File	Presentation file is appropriately tweaked to show how each part is assembled, with all parts clearly viewable and without overlaps, and the view is optimally oriented.	Presentation file is appropriately tweaked to show how each part is assembled, but some parts are not clearly viewable, or may be overlapped by other parts, even though the view is optimally oriented.	Presentation file is incompletely or improperly tweaked to show how each part is assembled; some parts are invisible, or may be overlapped by other parts; an optimal view may not be presented.	Presentation file does not have the appropriate tweaks to show how the parts are assembled.	File is missing.	
Drawing Packet (x 4) [20 points]	Most appropriate isometric view shown in color. Exploded view tweaks are well-placed to show parts clearly and BOM & balloons neatly done. Multi-views are lined up properly and projected from a base view. Alternate views are used appropriately. Parts chosen for drawings represent your skill level.	Appropriate isometric view shown in color. Exploded view tweaks are placed to show parts clearly and BOM & balloons done. Multi-views are lined up properly and projected from a base view. Alternate views are used Parts chosen for drawings represent your skill level.	Appropriate isometric view shown in color. Exploded view tweaks are placed to show parts clearly and BOM & balloons done. Multi-views are lined up. Alternate views are used. Parts chosen for drawings do not represent your skill level.	Isometric view shown in color. Missing exploded view(s) or BOM & balloons.. Parts chosen for drawings are far below your current skill level.	Drawing sheet(s) is(are) missing.	

Part 6: Electronic Presentation [30 points]

Elements	5 Points	4 Points	3 Points	2 Points	0 Points	Total
Color and Design	Presentation slides follow an appropriate theme/design. Headings and text are properly colored and sized to be easily read.	Presentation slides follow a theme/design. Headings and text are colored and sized to be easily read.	Presentation slides do not follow a theme/design. Headings and text may be difficult to read at times.	Presentation slides do not follow a theme/design. Headings and text are difficult to read.	No theme/design used. Slides/colors disjointed.	
Title Page	Title page contains all required elements (your name, project name, course name, date, picture) and is well-written and presented.	All required elements are present, but contain some grammar/spelling issues, or presented in slides that have contrast or design issues.	Some elements are missing, or both grammar and slide design have issues.	Required elements are missing and slide design and execution are poor.	This part was not done.	
Table of Contents	TOC contains all required elements (sections and corresponding slide numbers) and is well-written and presented.	All required elements are present, but contain some grammar/spelling issues, or presented in slides that have contrast or design issues.	Some elements are missing, or both grammar and slide design have issues.	Required elements are missing and slide design and execution are poor.	This part was not done.	
Design Brief	Design Brief contains all required elements (client, target consumer, designer, problem statement, design statement, constraints, and deliverables) and is well-written and presented.	All required elements are present, but contain some grammar/spelling issues, or be presented in slides that have contrast or design issues.	Some elements are missing, or both grammar and slide design have issues.	Required elements are missing and slide design and execution are poor.	This part was not done.	
Summary of Design Solution (x 2)	Assembled and exploded views are incorporated as needed to present your final design, accompanied by well written descriptions that sell your ideas.	Assembled and exploded views are incorporated to present your final design, but there may be unclear graphics, text, or stylistic compromises that blunt the message.	Some views are missing, or descriptions and slide design are not well executed and detract from the message.	Views are missing. Descriptions are haphazard and the theme of the presentation is poorly communicated.	This part was not done.	

Live Presentation [10 points]

Elements	5 Points	4 Points	3 Points	2 Points	0 Points	Total
Delivery	Effectively and creatively delivers the information while staying on topic and considering the audience. Excellent use of voice, posture, eye contact, gestures and pace. Interesting and vivid to hear.	Good delivery of information while staying on topic and considering the audience. Speaks clearly and confidently although may not demand attention or inspire interest.	Adequately delivers the information while staying on topic. Lack of confidence, appears nervous and fidgety. Marginal use of posture, eye contact, gestures, pace. Poor voice volume and intonation.	Delivers the information but does not stay on topic. Little consideration of audience. Uses incomplete sentences. Speaker appears anxious. Difficult to hear.	Little attempt is made to stay on topic. Does not consider audience. Presentation is difficult to follow and understand.	
Timing	Presentation lasted four to five minutes.	Presentation lasted more than five minutes.	Presentation lasted less than two minutes.	Presentation lasted less than one minutes.		

Individual Deliverables [15 points]

Elements	5 Points	4 Points	3 Points	2 Points	0 Points	Total
Design Brief Notes & Team Norms	A section titled neatly for this project with notes about the key points in design brief clearly included. Team norms recorded neatly.	A section titled neatly for this project with notes about the key points in design brief included. Team norms recorded neatly.	A section titled for this project with notes about the key points in design brief included. Team norms recorded.	A section titled for this project but missing design brief notes or team norms.	This part was not done.	
Brainstorm (x 2)	Produces at least 4 viable and accurate pictorial sketches of the required design concepts. Each is properly detailed for effective communication, including dates, signatures, labels, and descriptions.	Produces at least 3 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.	This part was not done.	