

CATEGORY	<b>1</b> <b>Does Not Meet Expectations</b> (0-25% of points)	<b>2</b> <b>Attempted to Meet Expectations</b> (25-50% of points)	<b>3</b> <b>Meets Expectations</b> (50-75% of points)	<b>4</b> <b>Surpasses Expectations</b> (75-100% of points)	# of Pts.
<b>DEFINING THE PROBLEM</b>	Offers an unclear statement of the problem. There is no support, documentation, or need for development. Little or no work is evident.	A short description and explanation is offered to the problem without any support and specifications for development pursuits.	A good statement and support/documentation is given to suggest the need to develop the product. Design specifications and constraints are also noted.	A lengthy clear description where design specifications and constraints are offered. Research and supporting documentation shows an overwhelming need that the problem should be pursued by development.	
<b>RESEARCH, BRAINSTORMING, AND DEVELOPING IDEAS</b>	Little research and brainstorming accomplished. Ideas generated are not original.	Research is evident as an outcome of brainstorming. Ideas generated are a result of the brainstorming process and not original.	Ideas generated are new and original as an outcome of brainstorming and research. Little suggestions are offered for the rest of the design process if any.	Many new ideas are generated as an outcome of brainstorming and research. Suggestions and details are given for design constraints of the product and for manufacturing.	
<b>CONCEPTUAL DESIGN AND SKETCHING</b>	Only one sketch is offered for a design review.	At least two sketches are offered for a review. The sketches offer no design specifications or annotation.	More than two sketches are offered for a review. The sketches include design specifications and annotation for developing the design.	Multiple thumbnail drawings are offered (minimum of 5). Additionally, accurate orthographic and isometric views are drawn to proportion for communicating the design for a review. Design specifications and annotations are clearly noted on the sketches. Constraints are also considered and noted.	

CATEGORY	<b>1 Does Not Meet Expectations</b> (0-25% of points)	<b>2 Attempted to Meet Expectations</b> (25-50% of points)	<b>3 Meets Expectations</b> (50-75% of points)	<b>4 Surpasses Expectations</b> (75-100% of points)	# of Pts.
<b>DEVELOPING THE DESIGN</b>	A set of sketched working drawings without an assembly drawing. 3D representations of each part of the assembly on the working drawings are missing. Annotations, dimensioning and blocks are not accurate.	A set of production drawings with an assembly and working drawings. Each orthographic drawing includes a 3D representation. Annotations, notations, blocks, and dimensioning are inaccurate.	A set of production drawings with an assembly and working drawings. Multiview drawings are added additional to orthographic drawings. A 3D representation is included on all multiview drawings. Annotations, notations, blocks, and dimensioning are slightly inaccurate.	Presents a set of production drawings with an assembly and working drawings. Each multiview drawing (including orthographic) includes a 3D representation with accurate annotations, notations, blocks, dimensioning, and tolerancing.	
<b>MAKING A MODEL OR PROTOTYPE</b>	Model is missing or does not look like concept sketches.	Model is proportional to sketches, inaccurate in scale, and dimensioning does not follow industry standards.	Model is accurate in proportion and dimensioning according to concept sketches and industry standards.	Accurate and proportionally modeled according to design specifications, industry standards, constraints, dimensions, and sketches.	
<b>ENGINEERING TESTING AND EVALUATING THE DESIGN</b>	Testing and evaluating designs/model are missing or not checked/approved.	Testing and verification attempted by checks and approvals without results.	Testing and verification are complete with checks/approvals and detailed results are not following industry standards.	Design and model accurately represent each other following industry standards. Testing or evaluation of designs/models indicate revisions if necessary through checks and approvals.	

CATEGORY	<b>1</b> <b>Did Not Meet Expectations</b> (0-25% of points)	<b>2</b> <b>Attempted to Meet Expectations</b> (25-50% of points)	<b>3</b> <b>Meets Expectations</b> (50-75% of points)	<b>4</b> <b>Surpasses Expectations</b> (75-100% of points)	# of Pts.
<b>REVISING THE DESIGN</b>	No attempt made to revise the design. Revision blocks not completed.	Designs revised without revision blocks completed.	Designs revised according to change requests and revision blocks filled out appropriately, but no approval or checking sought after the first revision.	Production drawings are changed according to testing and check results if needed. Revision blocks are noted and approval/checking/testing continues until plans have final approval.	
<b>CREATING A FINAL MODEL, PROTOTYPE, OR MOCKUP</b>	Missing prototype model or mockup.	Mockup or prototype model is not accurate according to production drawings	Prototype model or mockup is accurate according to production drawing and created out of materials not specified.	An accurate example of a manufactured model or mockup of the model is created according to final approved production drawings. Accurate design specifications, materials, and constraints are followed and implemented in developing the example.	
<b>PRESENTATION</b>	A presentation given without preparation and an outline.	A presentation given without a professional presence, good public speaking and a well thought out organized outline.	An organized outlined presentation with a professional presence, a written proposal, good public speaking and visual aids.	An oral professional proposal given, including: 1. Written proposal with support documentation. 2. Conceptual designs. 3. Production drawings. 4. Prototype or mockup. 5. Testing and evaluation results. 6. Outline or slides of presentation given. 7. Good public speaking. 8. Professional presence.	