

Curriculum Standard One: The students will demonstrate proficiency in the planning and layout processes.

Performance Objective	Critical Attributes	Benchmarks/Assessment
<ol style="list-style-type: none"> 1. The student will demonstrate an understanding of designing, print reading, and measuring. 2. The student will read prints and use the information to plan, layout, and produce parts or projects. 	<ol style="list-style-type: none"> A. Can the student use the planning and layout processes to produce a working drawing? A. Can the student accurately plan and layout to produce a part or project? 	<ul style="list-style-type: none"> • The student will produce a working drawing of a part of project. • The student will present a completed part or object for viewing, which will be evaluated according to a rubric designed for the part or object.

Curriculum Standard Two: The students will demonstrate proficiency in how materials can be processed.

Performance Objective	Critical Attributes	Benchmarks/Assessment
<p>1. The student will use tools and machinery in the process of cutting, shaping, combining, and forming of materials to be manufactured.</p> <p>2. The student will develop, out of wood, metal, or plastic, a manufactured part or product.</p>	<p>A. Can the student identify the tools and machinery used in manufacturing?</p> <p>A. Can the student explain the process of how a part or product was manufactured?</p>	<ul style="list-style-type: none"> • The student will produce a product that is mechanical in nature. Product material can be wood, metal, or plastic. • The student will produce a product that is mechanical in nature. Grading will be based on a rubric developed between California State University, Sacramento and the Laguna Creek Design and Manufacturing class.

Curriculum Standard Three: The students will demonstrate proficiency in various types of assembling.

Performance Objective	Critical Attributes	Benchmarks/Assessment
<p>1. The student will understand mechanical fastening, force, joining, fusion bonding, adhesive bonding use in the manufacturing process.</p> <p>2. The student will apply appropriate fastening or joining procedures to the design and production of a manufactured part or product.</p>	<p>A. Can the student list and describe the various types of fasteners and bonding adhesions used in manufacturing?</p> <p>A. Can the student develop a usable part or product that incorporates different fastening and bonding compounds?</p>	<ul style="list-style-type: none"> • The student will prepare an outline describing the processes of fastening and bonding use in a part in manufacturing. • The student will produce a project which incorporates the appropriate fastening or joining procedures.

Curriculum Standard Four: The students will demonstrate proficiency in the finishing process.

Performance Objective	Critical Attributes	Benchmarks/Assessment
<ol style="list-style-type: none"> 1. The student will be able to prepare a product surface for preparation and application of a selected finish. 2. The student will select the proper finishing process for a product. 	<ol style="list-style-type: none"> A. Can the student list the procedures for preparation of a product for finishing? A. Can the student select the correct applications to apply a finish to a part or product? 	<ul style="list-style-type: none"> • The student will list the correct preparation sequence for applying a finish to a product. • Following the proper finishing techniques, the student will apply the appropriate finish to part or product.

Curriculum Standard Five: The students will demonstrate proficiency in inspection and quality control.

Performance Objective	Critical Attributes	Benchmarks/Assessment
<p>1. The student will perform on-line inspections of parts and products.</p> <p>2. The student will inspect parts and products to meet specific design specifications.</p>	<p>A. Can the student detect a defective part or product?</p> <p>A. Can the student develop a part or product to meet specific design specifications?</p>	<ul style="list-style-type: none"> • The student will fill out a quality control report to detect defective parts or products. • The student will present a specification part or product for evaluation by industry partnerships.