

Expectations and Outcomes

Grade Level/Course:10-12

Content Area: Tech Ed

Unit Title	Guarantees
Week 1-4	<ul style="list-style-type: none"> • Understand expectations, class rules, and policies • Identify different careers in the industrial metalworking field • Measure effectively with various instruments • Use tools correctly SMAW Welding Safety Test
Week 5-16	Understand 5 common types of welds <ul style="list-style-type: none"> • Practice welding procedures on Simulator • Utilize SMAW welding machine to become proficient in process • Utilize GMAW welding tools to become proficient in process • Setup and operate various metal cutting and grinding tools to cut and prepare metal • Use measurement skills to mark out sheet metal • Cut, form, spot weld, and paint sheet metal project • Tour D&S and Nelson
Week 17-19	<ul style="list-style-type: none"> • Reference magazines, LMC, and internet for ideas • Use drafting techniques and tools for scaled project plans • Design with ergonomics in mind • Plan with appropriate materials • Develop bill of materials
Week 20-22	<ul style="list-style-type: none"> • Brainstorm project ideas • Develop plans and procedures drawn to scale • Acquire materials
Week 23-36	<ul style="list-style-type: none"> • Use learned welding techniques and procedures • Cut and fabricate according the plans and bill of materials • Apply learned skills in project development • Use manufacturing skills needed to complete project • Demonstrate skills needed to safely use equipment

Unit Title	Guarantees
	<ul style="list-style-type: none">• Setup and use arc welding machines while adjusting for different size metals• Surface finishing and preparation• Final painting
Week 37-38	<ul style="list-style-type: none">• Self-assessment on project quality and employability• Fix, assemble, maintain shop tools• Maintain shop cleanliness