

WOOD/METAL PRODUCTION
GRADES 9-10

(1 Semester - Prerequisite: Exploring Wood/Metal Technology)

COURSE OVERVIEW:

This course is designed for the student to apply the fabrication processes learned in Exploring Wood/Metal Technology and to utilize those processes in a manufacturing environment. Students will design, develop, and manufacture a product. The construction unit will focus on basic home construction practices from the blue print to rough framing. The servicing unit will involve an overview of the servicing industry including maintaining consumer and industrial products.

UNITS OF INSTRUCTION:

- UNIT I - Metalworking Processes - Sheet Metal Development
- UNIT II - Design and Drawing
- UNIT III - Woodworking Processes
- UNIT IV - Construction, Residential Systems
- UNIT V - Servicing Industry for the Consumer
- UNIT VI - Oxyacetylene and Welding
- UNIT VII - Foundry – Level 2 Activity

STUDENT OUTCOMES:

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| 1. | Students will have a working knowledge of the different components of a manufacturing enterprise. |
| 2. | Students will learn to develop and utilize more advanced woodworking and metalworking processes. |
| 3. | Students will understand basic home construction, its terms, and importance it plays in today's economy. |
| 4. | Students will have a practical awareness of the service industry, its opportunities, and its importance. |
| 5. | Students will have a practical understanding of the oxyacetylene system and basic MIG welding. |
| 5. | Students will have a practical understanding of advanced foundry processes. |

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MAJOR LEARNING EXPERIENCES TO ACHIEVE OUTCOMES:

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| 1. | Become familiar with sheet metal layout, development, and processes to produce a tool box. Become familiar with basic drawing practices and produce a set of working drawings. |
| 2. | Utilize woodworking processes to complete a woodworking project. |
| 3. | Produce a level 2 foundry project. |
| 4. | Produce a floor plan and understand the residential systems involved in a home. |
| 5. | Practice oxyacetylene beazing and MIG welding. |
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ADOPTED TEXT OR PRINCIPAL MATERIALS USED:

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| Handouts developed for the course will be utilized throughout the course. Lecture and demonstrations are also utilized throughout the semester. |
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(04/25/00)