

Course Title: Design and Production Technologies (grade 9)

Course Description: This class will offer students a chance to explore designing, machining, metalworking, and woodworking technologies. Students will learn about various materials, processes, tools, and machines. This is a fast paced course with fabricated project choices. Upon successful completion of the **Design and Production Technologies** course, a student will earn credit for the **MN Academic Standard for the Arts/Media, a graduation requirement.**

Course Outline:

- Demonstrate a comprehension of proper safety behaviors
- Analyze electronic media to convey a message.
- Interpret a detailed schematic to create an original product.
- Manipulate color to solve a problem.
- Use machine processes to exhibit work.
- Manufacture a project using basic problem solving techniques.
- Operate tools and machine in a sequence to display results.
- Revise work from multiple sources of critique.
- Generate reflections using the language of technical literacy.
- Evaluate technical skills by using the tools of the medium.

Course Schedule/Assignments: Class is one trimester in length and 55 minutes per day. Assignments include study in:

- Problem solving skills (hands on application of knowledge to achieve a solution).
- Basic principles design.
- Knowledge of systems (methods using logic and creativity to meet specific goals).
- Generating products using modern wood and metal manufacturing techniques.
- Safe use of tools and machines for project production

Course Grading Criteria and Grading Scale:

A = 90 – 100%

B = 80 – 89%

C = 70 – 79%

D = 60-69%

Course Expectations:

Work within the boundaries of the class rules to complete homework and lab projects of the highest quality in a timely manner.