General Course Information

Course Name: Advanced Metals	
Department: Technology and Engineering	Grade Level(s): 10-12
Duration/Credits: 1 year/ 1.0 Practical Arts credit	Prerequisites: Successful completion of Metals II or teacher approval
BOE Approval Date:	Course Code: H4055

Course Description:

Advanced Metalworking provides skilled metalworking students the opportunity to work on independent and self-designed projects. Students will also develop higher level skills and techniques with machine tools. Students successfully completing this course are prepared to move into welding, machining and other industry related fields.

Course Rationale:

Advanced metalworking provides a strong foundation for metalworking careers. This course is designed for students who already have mastered basic metalworking and are ready to challenge themselves with more complex projects.

Course Objectives:

- The student will apply safety protocols for previously learned techniques and equipment and read, apply, and follow safety protocols for new techniques and equipment in the metalworking shop environment (A+ Reading).
- The student will select and use a wide range of appropriate tools safely and effectively to complete metalworking projects.
- The student will create, write, and follow plans for metalworking projects (A+ Writing).
- The student will research, design, create, and professionally finish independent, self-designed projects, as well as fabricating assigned projects. (A+ Research)
- The student will work independently and collaboratively to complete projects and to give and receive constructive feedback. (A+ Speaking and Listening)
- The student will develop career skills, such as soft skills, resume creation, and job search and interview techniques.
- The student will maintain a safe and clean working environment.

Standards Alignment: