

**Machine Shop Community Outreach Course
Sparta Area School District**

**Title/Activity: Machine Shop Projects with Metal Lathe and Vertical Mill
Soft-Faced Hammer and Dice**



Instructor: Mr. Steve Schauf
sschauf@spartan.org

Location: Sparta High School Room 709/711
(608) 366-3504 Extension 8711

Course Information

This community outreach course introduces adult students to basic machining in the manufacturing of their own 304 stainless steel, acetal copolymer and brass soft-faced hammer and 6061 aluminum dice. Students will become familiar with and utilize the instruments, and tooling associated with metal lathe and vertical mill operations in this project based and instructor guided process. Classes will be held from 5:30 - 8:30 pm for six weeks on Wednesday evenings, March 27- May 1 , 2024. Course enrollment will require ten students for the course to be held. The course fee of \$90 includes the consumable materials, tooling, equipment and instruction.

Course Materials Provided

- 1" x 14" 304 stainless steel round bar stock
- 1" x 3" brass and copolymer round bar stock
- 1" x 1" x 4" 6061 aluminum square bar stock
- 1" x 10" 1018 steel round bar stock (practice piece)

Student Provided

- You may purchase safety glasses or bring your own Z87 safety glasses from home, but they must be approved by the instructor.
- Proper shop apparel and footwear per safety guidelines.
- All personal liability is the responsibility of the student.

Course Expectations and Requirements

1. RESPECTFUL, CIVIL and RESPONSIBLE BEHAVIOR while working in the shop with instructor, peers, equipment and facility is required.
2. Follow all safety protocols, wearing safe apparel, respect, care and clean up of the facility, equipment and tooling is required. Refusal to follow expectations may result in removal from the class without reimbursement.
3. Once distributed by the instructor, ALL project materials are the responsibility of the student.

Course Objectives

1. Provide an opportunity for members of the Sparta community to personally witness and experience some of the outstanding Sparta High School programming, in a project or skill based environment.
2. Create a life enhancing experience and camaraderie through a community educational outreach event.
3. Develop basic machining skills and proficiencies in the manufacturing of personal projects.
4. Students manufacture and keep one soft-faced, stainless steel hammer and one set of aluminum dice. Other projects may become a possibility depending on time, expertise and additional material expense.

Registration and Course Payment Process

1. Please register in person at the District Office- 900 E Montgomery St-
between the hours of 7:15 am and 3:15 pm
2. If you can't make it during those hours please contact Holly Church at
email: hchurch@spartan.org
phone: 608-633-1807