Instructional Equipment Request 2015

Sculpture Department
Moto Ohtake, Instructor

Kalamazoo Vertical Belt Sander with Vacuum Base
Model # S6MV-1
Approx. Cost $3000

Benefits:
The Vertical Belt Sander is an efficient and accurate machine for sanding metal. The machine will alleviate the need for hand-held angle grinders in many applications and will make the studio a safer environment. The built-in dust collection system will make the metal working environment cleaner.

Plasma Cutter
Miller Spectrum 875
Cost $2600

Benefits:
This plasma cutter works very precisely and easy to operate, allowing students to expand their artistic endeavors and technical abilities. The machine is easy and safe to operate, once it has been properly demonstrated and followed by a safety test.   The use of this plasma cutter provides technical skills relevant to metal current fabrication industries.

Justification

1. Student Learning Outcomes/goals

ARTS 37 A

Outcome 1
The student will use a variety of materials effectively and safely. Use basic hand and power tools properly and safely which apply to the sculpture making process.

- Both tools are simple and safe to operate after the safety demonstrations and test.

Outcome 2
The student will develop and apply a personal and concise visual statement which represents a specific concept in a sculptural format. Place an emphasis on idea development and visual investigation.

- Both pieces of equipment are advantageous in support the student's ability to create their projects with precision and ease of operation.

Outcome 3
The student will practice critical thinking and problem solving skills.

- Students need good plans to achieve good results. Both pieces of equipment will allow students to practice critical thinking and problem solving skills by applying techniques that include set-up, jig making and clamping.   Student will use relevant safety precautions.

ARTS 37 B

Outcome 1
The student will expand on idea development to include technical skills, visual investigation and the making process.

- The plasma cutter will create an opportunity for students to develop their technical skills including cutting, gouging and the use of plywood templates, etc.

Outcome 2
The student will develop critical thinking and problem solving skills. Further express a personal and concise visual statement which represents specific concepts in a sculptural format.

- Please see ARTS 37A Outcome 3

ARTS 37C

Outcome 2
The student will practice critical thinking and problem solving skills.

- Please see ARTS 37 A Outcome 3

ARTS 58 A

Outcome 3

The student will apply critical thinking skills and problem solving skills while creating their project.

- Both pieces of equipment will provide students with an ability to perform specific tasks as needed.

Outcome 4
The student will demonstrate proper safety procedures using appropriate tools and machinery.

- Each tool is easy to operate and performs with accuracy. Once the students have completed their safety demonstrations and test, they will be able to use the tools with ease.

ARTS 58 B

Outcome 2
The students will demonstrate proper safety procedures when using all shop tools and machinery.

- Please see ARTS 58 A Outcome 4

ARTS 58 C

Outcome 2
The student will integrate advanced skills in woodworking and metal working techniques to produce a work of art piece of furniture. Students will demonstrate proper safety procedures when using tools and machinery.

- Please see ARTS 58 A Outcome 4, ARTS 37 A Outcome 2

2. Student Success Rates

Both pieces of equipment will help student success rate indirectly because each piece of equipment will enable each student to perform their jobs efficiently and effectively, as compared to other methods, using outdated tools.

3. Student Retention Rates

Up-to-date equipment will support student retention rate as well.

4. Equity Goals

These tools will help all students, including the targeted group.