

# Berrien Springs Partnership Lab Syllabus and Instructor Qualifications

**LABS (CLASSES) ARE PROVIDED AS AN EDUCATIONAL SOURCE FOR PBL (PROJECT BASED LEARNING)**

## **COMMUNITY CLASS TITLE: Blacksmithing Fundamentals**

GRADE OR AGE LEVELS: 5th Grade/ 10 years of age or requires instructor permission

FORMAT: **IN-PERSON** ~~ONLINE~~

DAY AND TIME OF THE WEEK: TBD with Students Families

TOTAL REQUIRED HRS: 16 Hrs. ADD'L POSSIBLE HRS (OPTIONAL TIME): N/A

TOTAL SEMESTER HOURS POSSIBLE: 16 Hrs.

LOCATION (address):

Wolf Prairie Historic Arts, LLC

@ The Former Arden Gace Church

6891 M139/Old US 31

Berrien Springs, MI 49103

PRIMARY INSTRUCTOR: Henry E. Davis

- list additional instructors that will be background checked:

Ted Guimond

Dennis Kuemin

Steven Eisele

Note:

Minimum Class Size 2 Participants + 1 parent

Maximum Class size 4 Participants + 1 parent

## **Blacksmithing Safety Notice**

Interested in the blacksmithing — even just to observe?

Safety is important to all of us. Wear clothing made from natural fibers, like cotton, wool, leather, etc. Due to their inherent flammability, manufactured fabrics like nylon, spandex, polyester, etc. can significantly increase the tissue damage caused by a burn if something hot lands on it.

Attire:

- Natural Fiber clothes.
- No cuffs.

- No Jewelry
- No shorts, period.
- No open-toed shoes or shoes with holes in them.
- No sandals or crocs.
- Long sleeves preferred.
- If your hair is longer than 6 inches, please bring a secure way of tying it back.
- Tong on Glove hand is recommended for gas forges, but optional.

We will provide

- Personal eye protection: safety glasses or goggles.
- Personal hearing protection: ear plugs or sound reducing head gear.

Students should provide

- Personal Water
- Personal Snacks

Please Note: To come within the safety perimeter, even just to watch or take pictures, you must have appropriate attire (above list with the addition of the safety glasses we provide).

**CONTACT INFORMATION:** phone: (574) 274-0633

email: [HDavis@AppliedInnovation.com](mailto:HDavis@AppliedInnovation.com)

website: Under Construction

ADDITIONAL REGISTRATION AT SITE REQUIRED? YES ~~NO~~

IF YES, INSTRUCTIONS FOR REGISTRATION:

Please contact me via email [HDavis@AppliedInnovation.com](mailto:HDavis@AppliedInnovation.com) to arrange a class time.

Although I still work full time, we have made arrangements to offer a limited number of daytime classes during the week (Monday – Friday) in addition to those on Sunday and Monday-Thursday in the evenings.

INSTRUCTOR QUALIFICATIONS (may attach a separate page if necessary):

COURSE DESCRIPTION (OVERVIEW):

Our Philosophy

At Wolf Prairie Historic Arts, LLC we concentrate on developing the fundamental skills of a blacksmith through an instructor led age and skill level appropriate project-based approach. Each successive project is built on to the previous ones to either improve an existing skill or

introduce a new one, with the goal of providing a foundation for a lifetime of blacksmithing enjoyment.

The Seven Fundamental Skills of the blacksmith, we teach are:

- 1) **Drawing out:** Lengthening and thinning a piece of metal by hammering it out.
- 2) **Upsetting:** Shortening and thickening a piece of metal by hammering one end.
- 3) **Punching:** Creating holes in the metal, usually while it is hot.
- 4) **Bending:** Shaping the metal into different forms, sometimes over the horn of the anvil or with specialized tools.
- 5) **Splitting (or Cutting):** Using a chisel to cut a bar, either to length or lengthwise.
- 6) **Twisting:** Introducing a twist into a bar for decorative or functional purposes.
- 7) **Forge welding:** Bonding two pieces of metal together by heating them to a welding temperature and striking them with a hammer.

### Our Courses

For the 2026 Spring Semester we are offering the following courses:

- 1) **Beginning Blacksmithing:** For ages 10 & up, or in 5th grade or higher. For younger students/siblings please contact the instructor.

An introductory course designed using lighter materials where the child is given more time to complete the projects as an introduction to blacksmithing. For many students these projects will take more than 1 class to complete. The Parent/Guardian etc., may work with the child or if space is available complete the project with the parent(s) paying a \$20 per class materials fee.

- 2) **Blacksmithing Fundamentals** for ages 12 & up.

This is our flagship course and concentrates on developing the skills taught in the globally recognized curriculum through ABANA (Artist Blacksmith Association of North America). However, the focus is not on completing a checklist of requirements but on developing an understanding of the how and why as a foundation for a lifetime of blacksmithing enjoyment.

- 3) **Independent Study (Special Projects).** Ages 12 & up and requires previous experience and instructor approval.

This course concentrates on completing a special project of the students' choosing and requires the student to provide the materials. As an example, a student might want to make a reenactors civil war set up with tripod, cooking utensils and table supports, Gun supports, Flag holders, etc. Usually, this class is done in longer classes that meet less frequently; however it still requires a minimum of 16 hours of instruction.

- 4) **Special Needs,** requires instructor approval

Working one on one we offer ADA compliant blacksmithing instruction for those with special needs. This specialized instruction provides a unique experience for the student with instructor/parent helping as needed. We have worked with students ranging from those with limited vision to those with completely impaired. We have worked with those

who are confined to wheelchairs. Because this is extremely instructor intensive, we have limited availability. Please contact Henry Davis for more details, and availability.

## SYLLABUS/OUTLINE: WEEKLY BREAKDOWN OF PROJECT-BASED LEARNING LAB

### ACTIVITIES

*Describe activities that will reinforce the lesson. Include any work and time to be required outside of class:*

**Weekly breakdown of instruction:** There will be eight two-hour sessions. Classes will involve discussion of shop safety, forging demonstration(s) by the instructor, and student creation of hand forged items. Frequent water breaks are suggested. A 10 min break may be taken halfway through the class for drinks and snacks.

Representative schedule and projects:

Please Note: This varies from class to class, or even within the students in a specific class depending on the skill level of the individual student(s).

Week 1: Discuss shop safety. Practice “drawing a taper” by forging “kabob skewers”.

Week 2: Review shop safety. Forge one or more square nails and turn one into a key fob.

Week 3: Forge an “S” hook from square stock, add decorative twist and end finial.

Week 4: Forge twisted candle holder. (also known as a “courting candle”)

Week 5: Forge “letter opener” with handle twist and hook final decorative elements.

Week 6: Forge a “coat hook” with a leaf motif decorative element.

Week 7: Begin forging and fabricating an “Iron Puzzle”.

Week 8: Finish the “Iron Puzzle”.

Schedule and projects will be adjusted depending on student skills and needs.

## COURSE OBJECTIVES AND APPROXIMATE TARGET DATES:

*Steps to check for student understanding, along with dates or # of weeks into class:*

**STUDENT ASSESSMENT** - what will be used to evaluate student progress and/or end of semester pass/fail status?

- 1) Student agrees to attend at least 80% of class sessions/lessons offered.  
Attendance is kept online and tracked by Partnership staff. Failure to meet 80% or be on track to meet 80% may result in program discontinuation.
- 2) The Partnership Student Assessment or Performance Form is filled out by the teacher and turned in to Partnership staff. The link to this form is found on the web page for this class. Failing marks for lack of participation, behavior issues, practice time, etc. may result in program discontinuation.
- 3) Other: Photos of Finished Projects will be provided to Partnership Staff.

**Class-specific assessment:** discuss and include any form or a link to a form that you use.

**ADDITIONAL RESOURCES:** (online, books, video, etc.):

**CLASS POLICIES:** ATTENDANCE, BEHAVIOR, WEATHER, ETC.

**Attendance:** Blacksmithing is a hands on experience so 80% attendance is required to finish the class. We understand that life happens, and will do our best to work with you to make up time that you miss

**Weather:** Your safety is of the utmost importance, if you are worried about road conditions please call. If school is closed, attendance will be optional and a make up time will be arranged.

**Other:** No Horseplay, No bullying, No threats