**Semester(s) offered:   Spring 2019**

**Berrien Springs Parent Partnership**

**Independent Study/Project Based Learning Course Description and Syllabus**

**Course Title: Hand Forged Campfire Cooking Set**

**Ages/Grade Levels: Ages 13 yrs and up or prior blacksmithing experience**

**Class size: Min: 2 per meeting Max: 4 per meeting**

**Location Name: Guimond Metal Art Studio**

**Location Address: 04160 County Road 689**

 **South Haven, MI 49090**

**Provide directions to location if necessary:**

**Start Date: \_\_\_TBA\_\_\_\_\_\_\_\_\_\_
End Date: \_\_\_TBA\_\_\_\_\_\_\_\_\_\_\_** (Must be at least 16 hours of instructional time)

**Day of the Week: Circle: M Tu W Th F To be arranged with students**

**Begin and end time of class: \_\_\_\_\_\_TBA\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Contact/Instructors: Ted Guimond**

**Email and Website: tguimond@comcast.net**

**Best phone #: 269-767-4600 Publish # on website? Y**

**Does the student also need to register with you or at your location? Y**

**Classes will be (circle one): Pass/Fail**

**What is the criteria for passing the class? 80% on written test + satisfactory completion of projects.**

**Briefly describe the course, including topics to be covered and subject areas that the course will cover –this is what will be posted on our website:**

Students in this class will make a campfire cooking set consisting of: 3 kabob skewers, 3 “S” hooks, a fire poker, fire pit combination horizontal and tripod fire pit stand, fire pit stand crane, and an adjustable trammel hook. The students will use coal and gas forges and various blacksmith related tools while learning and practicing the blacksmithing skills of hand forging, drawing a taper, twisting, scrolling, bending, splitting, forming rings, forming spirals, drilling, and forging decorative elements.

**Weekly breakdown of instruction:** *There will be eight two hr sessions*

Week 1: Learn shop safety. Forge 3 kabob skewers .

Week 2: Review safety, Forge “S” hooks.

Week 3: Forge fire poker.

Week 4: Begin horizontal / tripod fire pit stand.

Week 5: Finish fire pit stand.

Week 6: Forge fire pit stand crane.

Week 7: Begin trammel hook.

Week 8: Finish trammel hook.

**All classes must have a min. of 4 Course Objective Checkpoints unique to your class. You will note on the attendance sheet when students have met these objectives. Write in #’s 2 and 3:

1st: pre-test**

 **2nd: Continuous attendance in class and satisfactory completion of projects through midterm date**

**3rd: Continuous attendance in class and satisfactory completion of projects through ending date**

**4th: post-test and satisfactory completion of all projects**

**List any materials that students are required to bring to class:**

* Students should always wear closed toe shoes (preferably leather)
* natural fiber clothing (100% cotton shirt and jeans).
* Pencil and notebook

**List any required or optional online resources you will use in class:**

* none

**Final Project: Circle method(s) of evaluation resulting in a percentage improvement score**

* Students will have actively engaged in class participation.
* Students will score a minimum of 80% on the final test. (same questions as on the pre-test).
* Students will satisfactorily complete all assigned projects.

**Please attach:**

**One 10 question (multiple choice, T/F, or open ended) pre/post-test to be given the first and last week of class that will assess knowledge of subject(s) covered in class during the semester. Scores must be recorded on the attendance form provided.**

**Cost per student for entire semester, including materials and supplies:**

**$20 per hr per student X 16 hr = $320.00 + $50 per student material fee = $370.00**

**Guimond Metal Art Studio requires that at least adult representative from each class remain with the class to provide instructor with “two deep leadership” for safety and liability purposes. Parents to work this schedule out among themselves.**

**Hand Forged Campfire Cooking Set PRE/POST TEST**

**1 Tell what type of clothing is appropriate to wear while blacksmithing.**

**A** Wear natural fiber clothes (jeans and 100% cotton shirt). Closed toe shoes (Leather preferred).

**2 How should you notify other people in the shop that you are going to put hot metal in or take hot metal out of the forge? Tell about both.**

**A** When moving hot metal, survey the shop to see where others are located. Then say in a loud voice, “HOT METAL” to announce your intention to move when your path is clear.

**3 What is a safe way to pass hot metal to another person?**

**A** Keep your hand on a safe place on the metal leaving enough cool metal protruding below your hand that another person may grasp the cool metal. If that is not possible then use tongs and pass the person the tongs. Do not release the metal until the other person says, “THANK YOU” to indicate that they have control of the hot metal.

**4 At what temperature does mild steel begin to melt? To burn?**

**A** Mild steel begins to melt at 2500 (F) and burn at 2800 degrees (F).

**5 How would you control the shape of your metal when drawing a taper?**

**A** Keep the metal squared the length of the taper. It is easier to control a square rod than a round one.

**6 Name at least three decorative elements in blacksmithing.**

**A**  Twists, hammer marks, leaves, punch marks, feathers, chisel designs…

**7 What blacksmithing processes are used to make a kabob skewer?**

**A** Hand forging, drawing a taper, forming a scroll, forming a hook.

**8 What is a trammel hook?**

**A** An adjustable “S” hook.

**9 What is a campfire cook set crane?**

**A** A device that slides up one side of the fire pit set and swings over and away from the fire.

**10 Name at least three processes used in making an “S” hook.**

**A** Hammering, drawing a taper, squaring, rounding, twisting, bending, scrolling

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