## **Learning Experience Template**

Course/Seminar Title: Tech Trades - Metals II (CP)

HS82508 (.5 credits)

Seminar

Course

Other

## **Learning Experience Description:**

Students review, practice, and demonstrate safe and appropriate use of tools and equipment learned in Tech Trades Metals I, and will also learn and demonstrate safe and appropriate use of the MIG and Stick Welding, and metals casting. Students will use the Engineering Design Process to imagine, design, and construct an advanced box project and a student designed project that combines new and old techniques.

## Measurement Topic areas touched upon in the learning experience (quick list):

**Industrial Technology: Materials Industrial Technology: Production** Industrial Technology: Safety

## **Expected Learning Targets (that students would have an opportunity to certify on):**

IA.PRO.HS.2 3: Understands how to use the Engineering Design Process to create a quality product 2: Understands the criteria/components that constitute a quality product

IA.PRO.MS.1 3: Understands the Engineering Design Process from planning to production. 2: Knows the steps in the Engineering Design Process from planning to production.

IA.SAF.HS.3 3: Is skilled at using safety procedures while using the lab equipment 2: Knows procedures for using each piece of equipment

IA.SAF.MS.2 3: Understands the purpose of each piece of equipment. 2: Knows the lab equipment.

Other related Measurement Topics/Learning Targets that may be touched upon and possibly certified by students (likely through additional work):

Suggested Prerequisite Learning Experiences (courses, seminars, learning targets):

Tech Trades - Metals I