Course/Seminar Title: Tech Trades - Woods V (CP)

HS82512 (.5 credits)

Seminar

Course

Other

Learning Experience Description:

This course will focus on advanced design and production techniques to allow for the creation of a student-chosen large project, such as a grandfather clock, river table, or other type of fine work that involves all of the processes learned through the Tech Trades sequence. This project must be agreed upon in advance between student and instructor, and the student is responsible for the cost of all materials not normally carried in the shop. Students review, practice, and demonstrate safe and appropriate use of tools and equipment learned in Tech Trades I- IV, and will learn and demonstrate further advanced techniques for tools already learned. Students will use the Engineering Design Process to imagine, design, and construct their capstone project, including using CADD software to assist in design. Advanced topics in tool use, construction, and finishing will be addressed according to the needs of the project.

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

Industrial Technology: Drafting Industrial Technology: Production Industrial Technology: Safety

Mathematics: Geometry: Measurement

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

IA.DRAFT.HS.2 3: Is skilled at creating a technical drawing for a product 2: Knows a conceptual sketch for a given product

IA.PRO.HS.2 3: Understands how to use the Design Loop/Process to create a quality product 2: Understands the

criteria/components that constitute a quality product

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

MA.GME.8.8 3: Understands reproducing a scale drawing at a different scale of a geometric shape or drawing 2: Knows the terms:

scale, scale drawing

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 - Woods IV