BCCM 2660

Division: Career and Technical Education
Department: Construction Technology
Course: BCCM 2660
Title: Entry and Passage Door Construction
Catalog Description:
This course provides hands-on technical training on how to build raised panel entry and passage doors for residential homes. During the course students will build the doors for the Snow College project house.
General Education Requirements: N/A
Semesters Offered: Fall
Credit/Time Requirement: Credit: 4; Lecture: 2; Lab: 4
Clock/Hour Requirements: 90
Offered for Non-Credit: Yes
Prerequisites: BCCM 2150 Cabinet Construction or consent of instructor

Justification:

Raised panel entry and passage doors have become very popular in the residential housing market. In this course students will build the doors for the Snow College project house. Students will gain experience in many woodworking operations, including laminating, machine setup, millwork, and finishing, techniques. These skills are essential in carpentry, cabinetry, millwork, finishing and other woodworking fields.

Student Learning Outcomes:
Upon successful completion of this course, students will be able to:

- calculate the quantity and cost of the materials needed to build the project house doors
- properly glue together rails, styles, and panels to produce a flat, stable door
- safely and correctly set up the shaper and shaper cutters to perform the necessary milling operations
- cut and mill rails, styles, and panels to correct sizes
- glue and assemble doors to build an aesthetically pleasing and functional product
- sand assembled doors and prepare them for finish
- mortise doors for hinges and bore for knobs and strikes
-

build appropriate door frames

- stain, glaze, and spray finish on doors
- enjoy the beauty of their finished products.

Content:

This course will include the study of the following topics:

- machine and hand tool safety
- calculating the quantity and cost of the materials needed to build the doors
- squaring and dimensioning the rails, styles, and panels of the doors
- setup and adjustment of the shapers and shaper cutters
- millwork operations
- door assembly
- prep work for hinges and knobs
- building door frames
- sanding techniques
- finishing operations.

General Education Outcomes:

6) Apply computational skills to a variety of contexts.

Students will learn to calculate the quantity and cost of the materials needed to build the doors for the project house. They will also calculate the sizes of individual door parts to make an accurately sized finished product with allowances for expansion and contraction. These calculations will be reviewed to assure quality in the final product and ultimately assessed at installation.

Applied Education Outcomes:

1) Students will acquire entry-level skills specific to and appropriate for employment in their chosen field of study.

Students will be able to build rails, styles and panels, mill and assemble doors, and perform the necessary f inishing operations needed for skilled employment. Students who go into Construction Management jobs will ha ve a well rounded knowledge of door manufacturing and will be able to evaluate door quality and value. Inst ructor critiques of doors built by students allow for assessment of skills.

3) Students will demonstrate safe practices and awareness of potential hazards in their field of expertise.

Students will demonstrate safe practices and an awareness of the potential hazards related to the materials, tools, a nd machinery used in door construction. Instructor observations and critiques assure that students understand

safety in the workshop.

Key Performance Indicators:

Student Learning Outcomes will be assessed by one or more of the following Key Performance Indicators:

- assigned projects
- class participation
- ability to follow instructions
- written tests/quizzes
- final exam.

Representative Text and/or Supplies:

- Safety glasses
- Pencil
- Tape measure
- Current instructional articles will be used at the instructor's discretion

Optimum Class Size: 12
Maximum Class Size: 16

Signatures:

I hereby submit this course syllabus:

_____

Marlin Christensen, M. Ed., Instructor

I hereby find this course consistent with the goals and resources of the Construction Technology Department:

_____

Marlin Christensen, M. Ed., Instructor, Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

_____

Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

_____

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

_____

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)