



BCCM 2150

Division: Career and Technical Education

Department: Construction Technology

Course: BCCM 2150

Title: Cabinet Construction

Catalog Description:

This course provides instruction in the principles and procedures used in the design, layout, and construction of cabinets for a residential home. It includes practical experiences in building quality cabinets for a residential project home. The course also includes a familiarization of tools, materials, and process of the woodworking industry with a special emphasis on safety.

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: N/A

Corequisites: N/A

Justification:

Students will learn essential skills needed to work in the building construction industry and to operate woodworking machinery safely. This course provides essential skills in building cabinets which are an important part of a residential home.

Student Learning Outcomes:

Upon successful completion of this course, students will:

- be able to identify and work with basic tools, machines, materials, and processes used in the woodworking industry
- develop and use safe working habits with hand tools, machines, and equipment used in the carpentry trade
- develop creative and problem-solving abilities through construction of a furniture and cabinet project
- acquire and develop the basic skills needed to plan, layout, and estimate costs of various styles of cabinets used in residential construction
- review, understand, and apply the correct safety procedures needed to use the machines and tools for the construction of cabinets.

This course will include:

- wood and processed wood materials and basic joinery
 - understanding the properties of wood
 - how to identify common hardwoods and softwoods
 - how wood is seasoned, graded, and processed
 - properties and grading of plywood and processed wood materials
 - joinery and common wood joints
- project planning and safety
 - planning your woodworking project
 - making a bill of materials and computing material costs
 - how to order and buy lumber and lumber products
 - shop safety procedures
- tools and machines
 - hand tool identification, use, and safety
 - proper use and safe practices of the following woodworking machines
 - miter saw - cutting stock to length
 - jointer
 - circular saw
 - band saw
 - surfacer
 - power drilling and boring machines
 - sanders
 - the basic operations and principles of safety for the following power hand tools
 - portable circular saw
 - motorized miter box saw
 - router and power hand plane
 - portable sanders
 - staple guns and nailers
 - drilling and boring tools
- construction of cabinet and woodworking project
 - glues, adhesives, and assembly techniques
 - wood fasteners
 - abrasives and sanding procedures
 - installation of hardware
 - drawer construction
 - door construction
- cabinet finishing procedures
- industrial production.

General Education Outcomes:

Applied Education Outcomes:

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

Students will have the basic knowledge and skills of building a simple cabinet, know the tools and be familiarized with the tools and equipment used in cabinet construction.

2) Students will become aware of industry specific certification and develop skills sufficient to acquire the same.

Students will all know the possible jobs available in the community for assisting in the cabinet building profession or become a contractor in cabinet building.

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

Students will each know the importance of the proper handling of tools and equipment while building basic cabinets and the importance of a well kept clean work site.

4) Students will demonstrate interpersonal skills specific to the skills and environment inherent in their field.

Students will each know how to properly communicate with co-workers, employers, employees, and potential customers.

Key Performance Indicators:

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

- written Assignments
- performance on the project
- exams/Quizzes (written or oral)
- attendance.

Representative Text and/or Supplies:

- Umstatted, William D. and Davis, Charles W., *Modern Cabinetmaking*, current edition, Tinley Park, Illinois: The Goodheart-Wilcox Company.

Optimum Class Size: 10

Maximum Class Size: 15

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)