

Master Syllabus

CAT 1721 - Structural Framing Systems

Division: Science, Mathematics and Engineering

Department: Civil Engineering Technology

Credit Hour Total: 6.0

Lecture Hrs: 2.0 **Lab Hrs:** 8.0

Date Revised: October 2012

Course Description:

Advanced technical training in wood and light-gauge steel framing systems, including exterior wall finishing and roof construction. Two classroom, eight lab hours per week.

General Education Outcomes:

- Critical Thinking/Problem Solving Competency
- Information Literacy Competency

Course Outcomes:

Proper construction techniques

Demonstrate proper construction techniques for wood frame construction.

Assessment Method: Behavioral observations

Performance Criteria: Receive at least 70% of available points on hands-on assessment.

Safe use of tools

Safely use hand and power tools in rough wood framing construction.

Assessment Method: Behavioral observations

Performance Criteria: Receive at least 70% of available points on hands-on assessment.

Architectural blueprints

Read and interpret framing and structural architectural blueprints.

Assessment Method: Locally developed exams

Performance Criteria: 70% or better on all exams

Roof rafter and truss systems

Describe the proper construction of roof rafters and the installation of truss systems.

Assessment Method: Locally developed exams

Performance Criteria: 70% or better on all exams

Roof shingles and other waterproofing systems

Install shingles and other roof waterproofing systems.

Assessment Method: Behavioral observations

Performance Criteria: Receive 70% of available points on hands-on assessment.

Exterior finishes

Demonstrate installation of exterior finishes.

Assessment Method: Behavioral observations

Performance Criteria: Receive at least 70% of available points on hands-on assessment.

Outline:

Floor systems
Wall systems
Roof framing
Roof sheathing and materials
Stair construction
Siding materials