

## 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

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#### 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