

Master Syllabus

CAT 1701 - Construction Craft Skills/Concrete

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:

An orientation to construction trades and working with concrete with strong emphasis on hands-on learning exercises. Includes Occupational Safety & Health Administration (OSHA) 10-hour construction safety. Two classroom, eight lab hours per week.

General Education Outcomes:

- Critical Thinking/Problem Solving Competency

Course Outcomes:

Building system installation

Demonstrate proper techniques for building system installation.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses

Safety

Demonstrate understanding of construction safety requirements.

Assessment Method: Behavioral observations

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

Assessment Method: Standardized national examinations

Performance Criteria: 70% or higher correct

Portland Cement Concrete

Identify the properties and ingredients of Portland Cement Concrete.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses.

Placement and finishing techniques

Demonstrate proper Portland Cement Concrete placement and finishing techniques.

Assessment Method: Behavioral observations

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

Outline:

Safety
Portland cement properties
Portland cement cost-volume calculations
Concrete preparation, forming, placing, finishing, curing and protecting
Masonry
Wood
Framing
Plumbing
Electrical
HVAC