

Master Syllabus

CAT 1820 - Construction Techniques II (NCCER Level 1)

Division: Science, Mathematics and Engineering

Department: Civil Engineering Technology

Credit Hour Total: 3.0

Lecture Hrs: 1.0 **Lab Hrs:** 4.0

Other Prerequisite(s): Approval of Department

Date Revised: December 2016

Course Description:

Construction of concrete structures including forming, placing and finishing. May be taken for two semesters. One classroom, four lab hours per week.

General Education Outcomes:

- Critical Thinking/Problem Solving Competency

Course Outcomes:

Site layout

Create a site layout plan.

Assessment Method: Locally developed exams
Performance Criteria:

70% or better on exams

Assessment Method: Portfolios
Performance Criteria:

70% or more of available points

Concrete forming

Construct concrete forms and place and finish concrete.

Assessment Method: Behavioral observations
Performance Criteria:

70% or more of available points

Assessment Method: Locally developed exams
Performance Criteria:

70% or better on exams

Portland cement concrete

Describe portland cement concrete use and reinforcing steel applications.

Assessment Method: Locally developed exams
Performance Criteria:

70% or better on all exams

Outline:

Site layout

Introduction to concrete

Introduction to reinforcing steel

Foundations and flatwork

Concrete forms

Reinforcing concrete

Handling and placing concrete

Manufactured forms