

Master Syllabus

CAT 1201 - Construction Methods & Materials

Division: Science, Mathematics and Engineering

Department: Civil Engineering Technology

Credit Hour Total: 4.0

Lecture Hrs: 3.0 **Lab Hrs:** 3.0

Date Revised: January 2015

Course Description:

Construction methods of materials for both residential and commercial structures. Emphasis on processes and techniques. Understanding of blueprint reading of architectural and civil drawings. Hands-on exercises of residential and commercial applications. Three classroom, three lab hours per week.

General Education Outcomes:

- ❑ Oral Communication Competency
- ❑ Written Communication Competency
- ❑ Critical Thinking/Problem Solving Competency
- ❑ Information Literacy Competency
- ❑ Values/Citizenship/Community Competency
- ❑ Computer Literacy Competency

Course Outcomes:

Common Building Materials

Know the origin, development and use of common building materials.

Assessment Method: Locally developed exams

Performance Criteria:

70% correct score on exams.

Industry Personnel

Identify the people involved in the construction industry.

Assessment Method: Locally developed exams

Performance Criteria:

70% correct score on exams.

Safety

Fulfill requirements for OSHA 10 hour card.

Assessment Method: Locally developed exams

Performance Criteria:

70% correct score on exams.

Terminology of Building Construction

Define the terminology related to the building construction industry.

Assessment Method: Locally developed exams

Performance Criteria:

70% correct score on exams.

Teamwork

Work effectively in teams to complete hands-on lab activities.

Assessment Method: Behavioral observations

Performance Criteria:

70% performance against teamwork rubric

Read Architectural Blueprints

read and interpret architectural blueprints.

Assessment Method: Locally developed exams

Performance Criteria:

70% correct score on exams.

Methods of Construction

Compare methods of construction used in buildings.

Assessment Method: Locally developed exams

Performance Criteria:

70% correct score on exams.

Outline:

Site construction

Concrete

Metals

Masonry

Woods

Plastics

Mechanical and Electrical Specialties

Special Construction