

Washtenaw Community College Comprehensive Report

CON 270 Construction Mechanicals

Effective Term: Fall 2012

Course Cover

Division: Vocational Technologies

Department: Construction Institute

Discipline: Residential Construction Technology

Course Number: 270

Org Number: 14725

Full Course Title: Construction Mechanicals

Transcript Title: Construction Mechanicals

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: New Course

Change Information:

Rationale: Advisory board recommendations.

Proposed Start Semester: Fall 2012

Course Description: This course covers the mechanical features installed in homes and light industrial buildings. Construction theory in class is included to support lab activities on and offsite. Students will discuss terminology, material recognition, and state requirements for identifying and troubleshooting home and light industrial utility and mechanical systems.

Course Credit Hours

Variable hours: No

Credits: 3

Lecture Hours: Instructor: 30 **Student:** 30

Lab: Instructor: 30 **Student:** 30

Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 60 **Student:** 60

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Level 3

Requisites

General Education

Request Course Transfer

Proposed For:

Central Michigan University

Eastern Michigan University

Ferris State University

Student Learning Outcomes

1. Identify building utility connections to the structure.

Assessment 1

Assessment Tool: Exam

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmental exam key

Standard of success to be used for this assessment: 80% of the students will score 80% or higher.

Who will score and analyze the data: Departmental faculty

Assessment 2

Assessment Tool: Lab exercises

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: departmentally-developed rubric

Standard of success to be used for this assessment: 80% of students will score 80% or higher

Who will score and analyze the data: Departmental faculty

2. Identify and troubleshoot internal electrical systems.

Assessment 1

Assessment Tool: Lab exercises

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: departmentally-developed rubric

Standard of success to be used for this assessment: 80% of students will score 80% or higher

Who will score and analyze the data: Departmental faculty

Assessment 2

Assessment Tool: Exam

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmental exam key

Standard of success to be used for this assessment: 80% of the students will score 80% or higher.

Who will score and analyze the data: Departmental faculty

3. Identify and troubleshoot internal building plumbing systems.

Assessment 1

Assessment Tool: Lab exercises

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: departmentally-developed rubric

Standard of success to be used for this assessment: 80% of students will score 80% or higher

Who will score and analyze the data: Department faculty

Assessment 2

Assessment Tool: Exam

Assessment Date: Fall 2015

Assessment Cycle: Every Three Years

Course section(s)/other population: All

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Who will score and analyze the data: Departmental faculty

Course Objectives

1. Recognize various forms of energy transmissions used in light frame construction.

Matched Outcomes

1. Identify building utility connections to the structure.
2. Recognize various forms of water supply and sewage used in light frame construction.

Matched Outcomes

1. Identify building utility connections to the structure.
3. Identify utility systems used for specific projects.

Matched Outcomes

1. Identify building utility connections to the structure.
4. Identify state requirements for specific projects.

Matched Outcomes

1. Identify building utility connections to the structure.
5. Diagnose problems that may arise when utility systems are installed incorrectly.

Matched Outcomes

1. Identify building utility connections to the structure.
6. Recognize various electrical components used in light framed construction.

Matched Outcomes

2. Identify and troubleshoot internal electrical systems.
7. Recognize how electrical components work in a system.

Matched Outcomes

2. Identify and troubleshoot internal electrical systems.
8. Diagnose problems that may arise when electrical systems are installed incorrectly.

Matched Outcomes

2. Identify and troubleshoot internal electrical systems.
9. Interpret state requirements for electrical systems for light framed construction.

Matched Outcomes

2. Identify and troubleshoot internal electrical systems.
10. Recognize various plumbing components used in light framed construction.

Matched Outcomes

3. Identify and troubleshoot internal building plumbing systems.
11. Recognize how plumbing components work in a system.

Matched Outcomes

3. Identify and troubleshoot internal building plumbing systems.
12. Diagnose problems that may arise when plumbing systems are installed incorrectly.

Matched Outcomes

3. Identify and troubleshoot internal building plumbing systems.
13. Interpret state requirements for plumbing systems for light framed construction.

Matched Outcomes

3. Identify and troubleshoot internal building plumbing systems.

New Resources for Course

Student hand tools

Course Textbooks/Resources

Textbooks

Manuals

Periodicals
Software

Equipment / Facilities

Level III classroom

Reviewer

Action

Date

Faculty Preparer:

Cristy Lindemann

Faculty Preparer

Feb 13, 2012

Department Chair / Area Director:

Cristy Lindemann

Recommend Approval

Feb 15, 2012

Dean:

Ross Gordon

Recommend Approval

Feb 15, 2012

Vice President for Instruction:

Stuart Blacklaw

Approve

Apr 05, 2012