

# Washtenaw Community College Comprehensive Report

## CON 149 Commercial Building Maintenance IV Effective Term: Winter 2012

### Course Cover

**Division:** Vocational Technologies  
**Department:** Construction Institute  
**Discipline:** Residential Construction Technology  
**Course Number:** 149  
**Org Number:** 14725  
**Full Course Title:** Commercial Building Maintenance IV  
**Transcript Title:** Commercial Building Maint. IV  
**Is Consultation with other department(s) required:** No  
**Publish in the Following:**  
**Reason for Submission:**  
**Change Information:**  
**Rationale:** Course Conditionally Approved; seeking full approval.  
**Proposed Start Semester:** Winter 2012  
**Course Description:**

Students will be introduced to University of Michigan sustainable technology, telecommunication, pumps and filter systems and vocational lab specific equipment. Students will become familiar with the mechanical, electrical, computer and other components of the systems and equipment. Following manufacturer specifications and recommendations, students will diagnose and perform minor repairs on this equipment. Standard procedures and safety will be emphasized.

### Course Credit Hours

**Variable hours:** No  
**Credits:** 3  
**Lecture Hours: Instructor: 30 Student: 30**  
**Lab: Instructor: 15 Student: 15**  
**Clinical: Instructor: 0 Student: 0**

**Total Contact Hours: Instructor: 45 Student: 45**

**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

#### Requisites

##### **Enrollment Restrictions**

Must be U of M contracted facility department to enroll

### General Education

#### Request Course Transfer

**Proposed For:**

## Student Learning Outcomes

1. Inspect, diagnose and repair sustainable technology systems.

### **Assessment 1**

**Assessment Tool:** Exam and lab exercises

**Assessment Date:** Fall 2014

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All

**Number students to be assessed:** All

**How the assessment will be scored:** Exam and lab exercises will be scored using an answer key and a departmentally-developed rubric.

**Standard of success to be used for this assessment:** 85% of the students will score 80% or higher on the exam and lab exercises.

**Who will score and analyze the data:** Departmental faculty

2. Inspect, diagnose and repair various telecommunication systems.

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3. Inspect, diagnose and repair various pumps and filter systems.

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4. Inspect, diagnose and repair various lab specific equipment.

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**Number students to be assessed:** All

**How the assessment will be scored:** Exam and lab exercises will be scored using an answer key and a departmentally-developed rubric.

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## Course Objectives

1. Recognize various components of sustainable systems.

**Methods of Evaluation**  
**Matched Outcomes**

2. Determine proper operation of various sustainable systems.

**Methods of Evaluation**  
**Matched Outcomes**

3. Troubleshoot sustainable system operation using manufacturer's recommended inspection sequencing.

**Methods of Evaluation**  
**Matched Outcomes**

4. Perform sustainable system repair within specified manufacturer's parameters.

**Methods of Evaluation**  
**Matched Outcomes**

5. Perform final manufacturer's inspection on sustainable systems to ensure proper operation.

**Methods of Evaluation**  
**Matched Outcomes**

6. Recognize various components of telecommunication systems.

**Methods of Evaluation**  
**Matched Outcomes**

7. Determine proper operation of telecommunication systems.

**Methods of Evaluation**  
**Matched Outcomes**

8. Troubleshoot telecommunication system operation using manufacturer's recommended inspection sequencing.

**Methods of Evaluation**  
**Matched Outcomes**

9. Perform recommended telecommunication system repair within specified manufacturer's parameters.

**Methods of Evaluation**  
**Matched Outcomes**

10. Perform final manufacturer's inspection on telecommunication systems to ensure proper

operation.

**Methods of Evaluation**  
**Matched Outcomes**

11. Recognize various components of water pumps and filter systems.

**Methods of Evaluation**  
**Matched Outcomes**

12. Determine proper operation of various water pumps and filter systems.

**Methods of Evaluation**  
**Matched Outcomes**

13. Troubleshoot various water pumps and filter systems using recommended manufacturer's inspection sequencing.

**Methods of Evaluation**  
**Matched Outcomes**

14. Perform water pump and filter repairs using specified manufacturer's parameters.

**Methods of Evaluation**  
**Matched Outcomes**

15. Perform final manufacturer's inspection on water pumps and filter systems to ensure proper operation.

**Methods of Evaluation**  
**Matched Outcomes**

16. Recognize various components of lab specific equipment.

**Methods of Evaluation**  
**Matched Outcomes**

17. Determine proper operation of lab specific equipment.

**Methods of Evaluation**  
**Matched Outcomes**

18. Troubleshoot lab specific equipment using manufacturer's recommended inspection sequencing.

**Methods of Evaluation**  
**Matched Outcomes**

19. Perform lab equipment repair within specified manufacturer's parameters.

**Methods of Evaluation  
Matched Outcomes**

20. Perform final manufacturer's inspection on lab specific equipment to ensure proper operation.

**Methods of Evaluation  
Matched Outcomes**

**New Resources for Course**  
**Course Textbooks/Resources**

Textbooks  
Manuals  
Periodicals  
Software

**Equipment/Facilities**

Off-Campus Sites

**Reviewer**

**Action**

**Date**

**Faculty Preparer:**

*Faculty Preparer*

*Aug 04,  
2011*

**Department Chair/Area Director:** *Cristy Lindemann*

*Recommend Approval*

*Aug 04,  
2011*

**Dean:** *Ross Gordon*

*Recommend Approval*

*Aug 04,  
2011*

**Vice President for Instruction:** *Stuart Blacklaw*

*Approve*

*Aug 25,  
2011*