# Washtenaw Community College Comprehensive Report

# **UAT 231 UA Green Awareness Certification Effective Term: Spring/Summer 2025**

## **Course Cover**

College: Advanced Technologies and Public Service Careers Division: Advanced Technologies and Public Service Careers Department: United Association Department (UAT Only)

**Discipline:** United Association Training

Course Number: 231 Org Number: 28200

Full Course Title: UA Green Awareness Certification Transcript Title: UA Green Awareness Certificati Is Consultation with other department(s) required: No

**Publish in the Following:** College Catalog, Web Page **Reason for Submission:** Inactivation

**Change Information:** 

Consultation with all departments affected by this course is required.

Rationale: U.A. Course no longer relevant **Proposed Start Semester:** Winter 2025

Course Description: In this course, students will receive instruction in "Green" awareness that emphasizes concepts and principles related to the specification, purchase and application of energy-efficient products. Upon successful completion of this course and a certification exam, students will receive a certification that attests to their knowledge of the emerging trends, terminologies, systems and products that are considered green. Limited to United Association program participants.

#### **Course Credit Hours**

Variable hours: No

Credits: 1.5

The following Lecture Hour fields are not divisible by 15: Student Min ,Instructor Min

**Lecture Hours: Instructor: 22.5 Student: 22.5** 

The following Lab fields are not divisible by 15: Student Min, Instructor Min

Lab: Instructor: 1.5 Student: 1.5 Clinical: Instructor: 0 Student: 0

**Total Contact Hours: Instructor: 24 Student: 24** 

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**

## **General Education**

## **Degree Attributes**

Below College Level Pre-Reqs

## Request Course Transfer

**Proposed For:** 

# **Student Learning Outcomes**

1. Recognize and apply the central concepts of green awareness.

## **Assessment 1**

Assessment Tool: Presentation

Assessment Date: Spring/Summer 2014 Assessment Cycle: Every Three Years Course section(s)/other population: All Number students to be assessed: All

How the assessment will be scored: Skill checklist with rubric

Standard of success to be used for this assessment: 75% of students will score 75% or above.

Who will score and analyze the data: Departmental faculty

2. Identify energy efficient mechanical systems used in high performance buildings.

#### Assessment 1

Assessment Tool: Presentation

Assessment Date: Spring/Summer 2014 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: 75% of students will score 75% or above.

Who will score and analyze the data: Departmental faculty

3. Describe water conserving systems in high performance buildings.

#### Assessment 1

Assessment Tool: Presentation

Assessment Date: Spring/Summer 2014 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: 75% of students will score 75% or above.

Who will score and analyze the data: Departmental faculty

# **Course Objectives**

- 1. Recognize terms related to the specification, purchase, and application of energy efficient products such as biodegradable and thermal mass.
- 2. Recognize the concerns about the increasing amount of carbon pollution.
- 3. Demonstrate appropriate use and knowledge of course materials.
- 4. Identify heat transfer in mechanical systems.
- 5. Analyze movement of heat through building structures.
- 6. Categorize mechanical system components.
- 7. Assess new energy efficient technologies.
- 8. Identify green water usage systems in buildings.
- 9. Identify potable and non-potable systems.
- 10. Design hybrid systems for maximum water conservation.
- 11. Identify revenue streams to fund high performance projects.
- 12. Recognize federal and state legislation for high performance buildings.

- 13. Interpret grant funding options for potential customers.
- 14. Identify building rating systems.
- 15. Compare manufacturer energy ratings.
- 16. Distinguish between the roles of federal, state and local agencies involved in high performance buildings.

# **New Resources for Course**

# **Course Textbooks/Resources**

Textbooks

Manuals

Esco Institute. Green Mechanical Systems Training Manual, Chiller Trader, 05-08-2008

Periodicals Software

# **Equipment/Facilities**

Level I classroom

Reviewer	<b>Action</b>	<u>Date</u>
Faculty Preparer:		
Tony Esposito	Faculty Preparer	Nov 01, 2024
Department Chair/Area Director:		
Marilyn Donham	Recommend Approval	Nov 04, 2024
Dean:		
Eva Samulski	Recommend Approval	Nov 06, 2024
<b>Curriculum Committee Chair:</b>		
Randy Van Wagnen	Reviewed	Jan 11, 2025
Assessment Committee Chair:		
Vice President for Instruction:		
Brandon Tucker	Approve	Jan 13, 2025

# **Washtenaw Community College Comprehensive Report**

# UAT 231 UA Green Awareness Certification Effective Term: Spring/Summer 2014

## **Course Cover**

**Division:** Advanced Technologies and Public Service Careers

**Department:** United Association Department **Discipline:** United Association Training

Course Number: 231 Org Number: 28200

Full Course Title: UA Green Awareness Certification Transcript Title: UA Green Awareness Certificati

Is Consultation with other department(s) required: No Publish in the Following: College Catalog, Web Page

Reason for Submission: Three Year Review / Assessment Report

Change Information:

**Credit hours** 

Total Contact Hours
Outcomes/Assessment
Objectives/Evaluation
Rationale: Course update

Proposed Start Semester: Spring/Summer 2014

**Course Description:** In this course, students will receive instruction in "Green" awareness that emphasizes concepts and principles related to the specification, purchase and application of energy-efficient products. Upon successful completion of this course and a certification exam, students will receive a certification that attests to their knowledge of the emerging trends, terminologies, systems and products that are considered green. Limited to United Association program participants.

## **Course Credit Hours**

Variable hours: No

Credits: 1

Lecture Hours: Instructor: 15 Student: 15

Lab: Instructor: 0 Student: 0 Clinical: Instructor: 0 Student: 0 Other: Instructor: 5 Student: 5

Total Contact Hours: Instructor: 20 Student: 20

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

<u>Requisites</u>

General Education
Degree Attributes

Below College Level Pre-Regs

# **Request Course Transfer**

**Proposed For:** 

# **Student Learning Outcomes**

1. Recognize and apply the central concepts of green awareness.

Assessment 1

**Assessment Tool:** Presentation

Assessment Date: Spring/Summer 2014
Assessment Cycle: Every Three Years
Course section(s)/other population: All
Number students to be assessed: All

How the assessment will be scored: Skill checklist with rubric

Standard of success to be used for this assessment: 75% of students will score

75% or above.

Who will score and analyze the data: Departmental faculty

2. Identify energy efficient mechanical systems used in high performance buildings.

Assessment 1

**Assessment Tool:** Presentation

Assessment Date: Spring/Summer 2014
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: 75% of students will score

75% or above.

Who will score and analyze the data: Departmental faculty

3. Describe water conserving systems in high performance buildings.

Assessment 1

**Assessment Tool:** Presentation

Assessment Date: Spring/Summer 2014
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: 75% of students will score

75% or above.

Who will score and analyze the data: Departmental faculty

## Course Objectives

1. Recognize terms related to the specification, purchase, and application of energy efficient products such as biodegradable and thermal mass.

#### **Matched Outcomes**

2. Recognize the concerns about the increasing amount of carbon pollution.

#### **Matched Outcomes**

3. Demonstrate appropriate use and knowledge of course materials.

## **Matched Outcomes**

4. Identify heat transfer in mechanical systems.

#### **Matched Outcomes**

5. Analyze movement of heat through building structures.

#### **Matched Outcomes**

6. Categorize mechanical system components.

### **Matched Outcomes**

7. Assess new energy efficient technologies.

## **Matched Outcomes**

8. Identify green water usage systems in buildings.

#### **Matched Outcomes**

9. Identify potable and non-potable systems.

## **Matched Outcomes**

10. Design hybrid systems for maximum water conservation.

## **Matched Outcomes**

11. Identify revenue streams to fund high performance projects.

#### **Matched Outcomes**

12. Recognize federal and state legislation for high performance buildings.

#### **Matched Outcomes**

13. Interpret grant funding options for potential customers.

## **Matched Outcomes**

14. Identify building rating systems.

#### **Matched Outcomes**

15. Compare manufacturer energy ratings.

### **Matched Outcomes**

16. Distinguish between the roles of federal, state and local agencies involved in high performance buildings.

**Matched Outcomes** 

## **New Resources for Course**

## Course Textbooks/Resources

Textbooks

Manuals

Esco Institute. Green Mechanical Systems Training Manual, Chiller Trader, 05-08-2008

Software

# **Equipment/Facilities**

Level I classroom

Reviewer	<u>Action</u>	<u>Date</u>
Faculty Preparer:		
Amanda Scheffler	Faculty Preparer	Jun 27, 2013
Department Chair/Area Director:		
Scott Klapper	Recommend Approval	Feb 03, 2014
Dean:		
Marilyn Donham	Recommend Approval	Feb 05, 2014
Vice President for Instruction:		
Bill Abernethy	Approve	Mar 31, 2014