

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

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.

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

Periodicals

Software

Equipment/Facilities

Level I classroom

Reviewer

Action

Date

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