

Fond du Lac Tribal and Community College
COURSE OUTLINE FORM

Updated 9/23/14

Please return this form to the college vice president of academic affairs and the chairperson of the Academic Affairs and Standards Council (AASC)

1. Prepared by: _____

2. Date submitted: _____

3. Date approved: 10/13/06 Date revised 09/23/14

4. Department/discipline: Electric Utility Technicians

5. Department(s) endorsement(s): _____

(Signatures of the person(s) providing the endorsement are required.)

6. Course Title: Home Energy Systems and Auditing

Abbreviated course title (25 characters or less): _____

7. Course Designator: EUT 8. Course Level: 1055 9. 2XXX

10. Number of Credits: Lecture 2 Lab 1

11. Control Number (on site) 20 Control Number (online) _____

12. Catalog/Course description:

The science of home energy systems and energy auditing methods will be covered in theory and practice with an emphasis on covering practical methods to increase home energy efficiency. Experts in home energy systems and auditing will provide, as a component of this course, information on current best practices.

13. Course prerequisite(s) or co-requisite(s): Accuplacer scores/ Other courses

Prerequisite(s):

Co-requisite:

14. **Course Materials** (Recommended course materials and resources. List all that apply, e.g. textbooks, workbooks, study guides, lab manuals, videos, guest lecturers).

Residential Energy, by John Krigger and Chris Dorsi, other textbooks, workbooks, guides, lab manuals, videos, guest lecturers. If applicable.

Guest lecturers and practical workshops will be a component of this course. Appropriate texts, videos, and other resources will be selected to provide up-to-date content.

15. **Course Content** (Provide an outline of major topics covered in course)

1. Theory and Fundamentals of Home Energy Systems
2. Home Energy Systems Assessment and Auditing Methods
3. Best Current Design Practices
4. New Construction and Retrofit Installation Procedures
5. Commissioning, Servicing, and Maintenance of Home Energy Systems

16. Learning Goals, Outcomes, and Assessment

At FDLTCC we have 4 Competencies Across the Curriculum (CAC) areas. They are as follows:

- A. Information Literacy (the ability to use print and/or non-print tools effectively for the discovery, acquisition, and evaluation of information)
- B. Ability to Communicate (the ability to listen, read, comprehend, and/or deliver information in a variety of formats.)
- C. Problem Solving (the ability to conceptualize, apply, analyze, synthesize, and/or evaluate information to formulate and solve problems.)
- D. Culture (knowledge of Anishinaabe traditions and culture, knowledge of one's own traditions and culture, knowledge of others' traditions and cultures, culture of work, culture of academic disciplines and/or respect for global diversity.)

Upon Completion of this course the student shall:

- 1. Perform a home energy audit successfully. (A, C)
- 2. Document audit deficiencies in a CAZ zone (B)
- 3. Prepare a suggested work scope for a home. (A, B, C)
- 4. Demonstrate knowledge of home performance. (A, B)

17. Minnesota Transfer Curriculum (MnTC): If this course fulfills an MnTC goal area, state the goal area and list the goals and outcomes below:

See www.mntransfer.org

Goal Area(s): _____

Goal and Outcomes: