

## COURSE SYLLABUS

Division: **Workforce Services**

Curricula in Which Course is Taught: Career Studies Certificate – Alternative Energy

Course Number & Title: **ENV 170-90 FUNDAMENTALS OF ENERGY TECHNOLOGY**

Credit Hours: **2**      Hours/Wk Lecture: **2**      Hours/Wk Lab: **1**      Lec/Lab Comb: **3**

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### I. Catalog Description:

An introductory course for students with little or no prior experience in the subject matter. Course will be delivered through approximately 60% lecture and reading and 40% hands-on experimentation. The course will utilize training equipment at RCATT. The student will learn to use thermal cameras and various home insulation products.

### II. Relationship of the course to curricula objectives in which it is taught:

Gives the student an overview of the field of energy conservation and use and provides descriptions of job functions typical to home energy technicians.

### III. Required background:

This course is intended for anyone with an interest in and desire to learn the subject matter. No prior knowledge of the subject matter is required.

### IV. Course Content:

- Empowering you to get control of your energy consumption
- Understanding household energy use
- Analyzing household energy usage
- What to expect from an Energy Audit
- Who can perform an Energy Audit
- Homeowner conservation resources
- Basic weatherization practices
- Material selection
- Prioritizing lighting upgrades

- Indoor air quality
- Personal comfort
- Guidelines for window replacements
- Domestic hot water consumption
- Water conservation
- Cleaning dryer ducts
- What to consider before purchasing alternative energy products
- How these practices benefit Alternative Energies

**V. LEARNER OUTCOMES:**

**VI. EVALUATION:**

<p>The student will have a basic knowledge of home energy conservation and the ability to apply what they have learned</p>	<ul style="list-style-type: none"> <li>• Homework/class work</li> <li>• Quizzes</li> <li>• Tests</li> <li>• Final exam</li> <li>• Class Participation</li> </ul>
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**The course supports the following objectives:**

DCC Educational Objectives

1. Communication
2. Critical Thinking
3. Computational and Computer Skills
4. Understanding Culture and Society