RENEWABLE ENERGY (EGY)

EGY 101 - Principles of Renewable Energy
Credit Hours: 3, **Contact Hours: 3**
This course covers the basic principles and history of renewable energy sources. Industry and governmental perspectives on geothermal, wind, solar, biomass, fuel cells, and other energy sources are highlighted. This course is required to achieve a Level II Certificate in Renewable Energy Technology. Group 2 course.
Required Prerequisites: EGY 115, may be taken concurrently
Recommended Prerequisites: Placement in MTH 23 or co-enrollment in the recommended developmental Math course, placement into ENG 11/111 or co-enrollment in the recommended English course.

EGY 105 - Sustainable Building Design
Credit Hours: 3, **Contact Hours: 3**
This course provides a great introduction to sustainable building practices. Through structured classroom activities, the student will learn about the structure of matter and the material world, whole system thinking, site and natural energy mapping, water resources, building orientation, materials and resources, indoor air quality, innovation and design. This course is required to achieve a Level II Certificate in Renewable Energy Technology. Group 2 course.
Recommended Prerequisites: Placement in MTH 23 or co-enrollment in the recommended developmental Math course, placement into ENG 11/111 or co-enrollment in the recommended English course.

EGY 115 - Residential Energy Efficiency
Credit Hours: 3, **Contact Hours: 3**
This course provides a broad spectrum of information regarding basic residential energy conservation.Through structured classroom and hands-on skill building, the student will learn about the principles of energy, building shell construction, air leakage, insulation, windows and doors, heating, lighting, cooling, water heating, health, and safety. This course, or its equivalency, is a required class for the Renewable Energy Certificate Program. Group 2 course.

EGY 141 - Solar Photovoltaic Tech I
Credit Hours: 3, **Contact Hours: 3**
Through structured lecture and practical skill building, students will become familiar with Solar Photovoltaic applications, solar radiation, basics of a site survey, system components, system sizing, and preparation of a solar installation. Group 2 course.
Required Prerequisites: ELE 105
Recommended Prerequisites: MTH 23 or placement into MTH 111, ENG 111

EGY 143 - Solar Thermal Technology I
Credit Hours: 3, **Contact Hours: 4**
This course provides an introduction to solar hot water heating systems. Through structured classroom and hands-on skill building, the student will learn the history of solar thermal heating systems, components, drainback systems, glycol systems, start up and maintenance procedures, savings and performance estimates, system control, monitoring and testing and solar space heating design. Group 2 course.
Required Prerequisites: PLU 101
Recommended Prerequisites: MTH 23 or placement into MTH 111, ENG 111

EGY 145 - Geothermal Technology
Credit Hours: 3, **Contact Hours: 4**
This course introduces the basic principles of geothermal energy production and technology. Essentials on how to utilize geothermal technology as an energy source will be analyzed and demonstrated. Examples of residential and commercial applications will be shown and reviewed. Group 2 course.
Required Prerequisites: HVA 105
Recommended Prerequisites: MTH 23 or placement into MTH 111, ENG 111