Hagerstown Community College OFFICIAL MASTER SYLLABUS DOCUMENT

Course: AET 104 Geo-Thermal Installation 3 credits

Instructor: Semester: Fall 2017

Course Description:

This course will provide the students with a general knowledge base of Geo-thermal operation, installation, and maintenance. Students will learn about the most commonly used designs available today. Students will learn how to evaluate a site to determine which design is best suited for a specific area, along with the pros and cons of selected systems. Students will learn installation safety, procedures, and trade practices common to the industry.

Required Texts:

Modern Geothermal HVAC Engineering and Control Applications Greg Cunniff ISBN- 0071792686 / 9780071792684 Carl Orio

STUDENT LEARNING OUTCOMES

On successful completion of this course, students should be able, at entry level, to:

- Perform Geo-thermal mechanical installation as part of a work crew.
- Follow safe work practices.
- Identify problems and take corrective action.
- Install and repair piping systems.
- Identify routine and preventative maintenance requirements and perform such task.
- Collect and evaluate operational data.
- Calculate basic electrical and thermal load.

Total Hours of Coursework:

To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute "academic" hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than 37.5 minimum hours of coursework per credit. For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class work.

Assignments/Assessments Clock Hours

In-class Instruction	45 hours
Textbook Chapter Readings	15 hours
Study of Manuals for Hands-on Activities	15 hours
Chapter Review Questions and Answers	15 hours
Research Assignments	15 hours
Exam Preparation	20 hours
	Total hours = 125 hours

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Services for Students with Disabilities: Students may receive reasonable accommodations if they have a diagnosed disability and present appropriate documentation. Students seeking accommodations are required to contact the Disability Support Services (DSS) office as early as possible. Students may contact a DSS staff member for an appointment at dss@hagerstowncc.edu or at 240-500-2530.