

**Hagerstown Community College**  
**OFFICIAL MASTER SYLLABUS DOCUMENT**

**COURSE:** ELE-210 Energy System Management 3 Credits

**INSTRUCTOR:**

**DATE:** Fall 2017

**COURSE DESCRIPTION:**

This class will introduce students to the concept and application of energy management for residential, commercial, and industrial applications. Students will be introduced to techniques to automatically measure, collect the data in systems, and apply the data for energy (and money) saving techniques. Students will work with key regional industry partners to gain a hands-on understanding of these systems. Prerequisite: INT 110. 3 Credits

**TEXTBOOK:**

Energy Audit of Building Systems, 2ND Edition, Moncef Krarti, CRC Press, ISBN:1439828717

**STUDENT LEARNING OUTCOMES:**

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

- Understand key energy issues such as the subtleties of electric utility rate structures and the latest building energy efficiency technologies and their applications.
- Evaluate the existing methods for measurement and verification of energy savings incurred by the implementation of energy conservation measures.

**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 the 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 coursework.

**Minimum clock hours required for this course**

	DIRECT Faculty Instruction In-class <b>37.5 hours required</b>	Student Work Out of Classroom <b>75 hours required</b>
In-class “lecture”	37.5 hours	
Reading chapters		15 hours
Quiz/activity for each chapter	Included in lecture time	10 hours prep
Lab Activities Prep		10 hours
3 lecture exams		30 hours exam prep
Cumulative final exam (Academic Testing Center)	Included in lecture time	10 hours exam prep
<b>Total Hours</b>	<b>37.5 hours</b>	<b>75 hours</b>

**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](mailto:dss@hagerstowncc.edu) or at 240-500-2530.