

Hagerstown Community College Master Syllabus

Course AET 101: Applied Mathematics for Technology

Course Information

Course AET 101: Applied Mathematics for Technology

1 Credits

Fall 2018

Instructor Information

Course Description

This course is for students in the Alternative Energy Technology certificate program. Applications from statics, dynamics, work, energy, and data analysis will be related to mathematics skills and concepts at or above the level of MAT 100. The course will be presented in an on-line format with instruction available in the Learning Support Center. Students may be required to attend the Learning Support Center for additional instruction and problem solving practice. Prerequisite: MAT 99. Concurrent enrollment in AET 102 is recommended.

Textbook and Course Materials

None. Problem sets and notes provided by the instructor and available through Moodle

Student Learning Outcomes

- Apply computational techniques and algebraic skills to solve problems encountered in the alternative energy workplace setting (Computational and Algebraic Skills).
- Apply visualization, spatial reasoning, as well as geometric properties and strategies to model and solve problems related to AET (Geometric Skills).
- Apply technology, where appropriate, to enhance and facilitate mathematical understanding, as well as an aid in solving problems and presenting solutions to AET situations. (Technological Skills).
- Communicate and understand mathematical statements, ideas and results, both verbally and in writing which apply to AET problems and situations. (Communication Skills).
- Work collaboratively with peers and instructors to apply mathematical concepts and solve problems related to AET situations. (Collaborative Skills)

Definition of Credit Hour: Classroom Courses

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 in 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 complete at least 2 hours of coursework outside of class for each hour of in-class coursework.

Classwork type	Direct Faculty Instruction In-class	Student Work Out of Classroom
In-class/Online lecture and	15	

Classwork type	Direct Faculty Instruction In-class	Student Work Out of Classroom
discussion		
Assignments/Quizzes		15
Test Preparation		5
Testing		3
Total	15 hours	23 hours

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.