

Hagerstown Community College
OFFICIAL COURSE SYLLABUS DOCUMENT

COURSE: INT 111 Pump and Motor Operation and Maintenance 3 credits

INSTRUCTOR:

SEMESTER:

Course Description:

This class will provide the students with a general knowledge base of various pump designs, operation, and maintenance. Students will learn the most common types of pumps use in commercial and industrial environments. Students will learn how perform preventive maintenance, repairs and trouble-shooting of pump systems. Hands-on labs include pump operation, bearing replacement, seal replacement, and pump system testing. Prerequisites: AET 102 or INT 101. Three credits.

Required Texts: Millwright Level 4 Trainee Guide, 3/E
NCCER 9780136045069 3rd edition Pearson

Class Methods:

The class will be taught using lecture, discussion, laboratory projects, and group activities.

CREDIT HOUR EXPLANATION

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.

Assignment/Assessment	Clock Hours
In-class Instruction	45
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

STUDENT LEARNING OUTCOMES

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

- Monitor and evaluate a typical pump system.
- Specify and install the correct pump for the application.
- Develop a preventive maintenance plan for a pump system.
- Perform maintenance on a pump system.
- Repair a typical pump system.
- Determine and correct the reason for a motor failure.