# Hagerstown Community College MasterSyllabus EGT-235-01 Fluid Power and Laboratory

### **Course Information**

EGT 235: Fluid Power and Laboratory 3 Credits Spring 2019 January 7, 2019 through April 29, 2019 Class on Mondays from 5:30 P.M. to 7:30 P.M. Laboratory on Wednesdays from 5:30 P.M. to 7:30 P.M.

## **Instructor Information**

## **Course Description**

This course focuses on the industrial use of fluid power. The fundamental properties of fluid statics and dynamics are applied to the design of pumps, valves, motors, actuators, accumulators, fluid circuits, and control systems. Laboratory fee required. \*Pre-requisite: PHY 201

## **Textbook and Course Materials**

Fluid Power with Applications, 2009, Prentice-Hall. 7th Edition ISBN 0-13-513690-4

#### TEXTBOOK (SUGGESTED):

Introduction to Fluid Power; Johnson, 2002, Delmar; ISBN: 07668-2365-2

#### **Student Learning Outcomes**

Upon completion of this class the student will be able to:

- Apply mathematical concepts
- Demonstrate the ability to think critically.
- Transfer theoretical knowledge into practical applications.
- Use effective communication 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 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

	<b>DIRECT</b> Faculty Instruction	Student Work
	In-class	Out of Classroom
	<b>37.5 hours REQUIRED</b>	100 hours REQUIRED
In-class "lecture"	37.5 hours	
3 Exams (2 Tests and Final Exam)		20 hours
Quiz/activity for each chapter		20 hours
Student Lecture		20 hours
Homework		40 hours
Total Hours	37.5 hours	100 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 <u>dss@hagerstowncc.edu</u> or at 240-500-2530.