

Hagerstown Community College
OFFICIAL MASTER SYLLABUS DOCUMENT

COURSE: ELE 130 Introduction to Drones

Credits: 3

INSTRUCTOR:

SEMESTER/YEAR:

Course Description:

This course is an introduction to the civilian use of drones. Topics include: FAA regulations for drones, mechanics, sensors and payloads, civilian usage, and operations. Students will get to fly a DJI Phantom 2 Vision+.

Required Texts:

None

Class Methods:

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

STUDENT LEARNING OUTCOMES

Objectives:

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

- Identify when it is safe to fly UAVs
- Identify different components of UAVs and explain what they do
- Identify the proper sensor to use for different situations and explain why it's the best option
- Describe the different regulations related to UAVs
- Describe how a multirotor is capable of controlled flight
- Safety operate a multirotor

Credit Hours Explained

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	15 hours
Chapter Review Questions and Answers	15 hours
Research Assignments	15 hours
Exam Preparation	20 hours
	Total hours=125 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.