## Hagerstown Community College OFFICIAL MASTER SYLLABUS DOCUMENT

**COURSE:** CYB 223 – Cybersecurity Select Topics **CREDIT HOURS**: 3

**INSTRUCTOR: SEMESTER/YEAR:** Fall 2016

**COURSE DESCRIPTION:** Cybersecurity is a vital yet rapidly changing field in the world today. In this course, students will be exposed to current topics in Cybersecurity and be introduced to cutting-edge Cybersecurity research. Topics include general computing, networking, security, privacy, forensics and mobile devices. Course can be substituted as an elective in the Cybersecurity program. Prerequisite: CYB 101

**TEXTBOOK:** None

**STUDENT LEARNING OUTCOMES:** Upon the completion of this course, students will have learned the following material(s) and have the following competencies:

- The skill to create a professional resume.
- Understand and explain concepts relating to protection of information systems against unauthorized access to or modification of information in its various forms.
- Understand denial of service to authorized users, what causes it, DOS/DDOS tools, and how to detect DOS/DDOS.
- Develop an understanding of technical terms and knowledge about techniques and methodologies for data protection and information assurance in a wide range of topics from Johns Hopkins lectures.
- Develop an understanding of rules and policies of information security, by reviewing ISO and NIST policies.
- Accurately collect, analyze and report data. Present complex data or situations clearly for research and presentation assignments.
- Develop improved communication and teamwork skills through group projects and presentations.
- Write a college level investigative paper based on applied research and to orally present findings in a professional manner

**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.

Hours Required	Topic
2	Resume Preparation
20	Quizzes
40	Homework Assignments/Projects
10	Interaction with JHUISI faculty/staff/students
40	Research Paper
10	Student Presentation and Preparation
20	Classroom