

# Hagerstown Community College Master Syllabus

## IST 276: Network Forensics

### Course Information

IST 276

3 Credits

Spring 2018

### Instructor Information

### Course Description

This course will introduce students to the fundamentals of network forensics. Topics covered include conducting forensic acquisition and analysis, analyzing network traffic, analyzing security and network logs. Students will gain experience using various network forensic tools and complete several case studies. Prereq. IST-166

### Textbook and Course Materials

*S. Davidoff & J. Ham, Network Forensics: Tracking Hackers through Cyberspace, Prentice Hall, 2014.*  
ISBN-13: 978-0-13-256471-7

*OER. Cichonski, P., Millar, T., Grance, T. and Scarfone, K. Computer Security Incident Response Guide: Recommendations of the National Institute of Standards and Technology. NIST Special Publication 800-61 Revision 2, August 2012.*

### Student Learning Outcomes

- The student will be able to explain the foundation of network forensic investigations and analysis
- The student will be able to perform a basic network forensic acquisition and analysis, including system artifacts, such as logs, and accurately present the findings
- The student will be able to use network monitoring tools to analyze network traffic, including intrusion detection systems and intrusion prevention systems
- The student will be able to apply critical thinking and problem-solving skills to case studies, projects and team assignments.
- The student will be able to perform analysis of malware, including static and dynamic analysis

### 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	Student Work Hours
Discussion posts (14)	14 hours
Reading (13 Chapters)	13 hours
Quiz (13) Midterm (5) Final Exam (5)	23 hours
Projects (4)	40 hours
Assignments (10)	30 hours
<b>Total</b>	<b>120 hours</b>

**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](mailto:dss@hagerstowncc.edu) or at 240-500-2530.