



Course Information:

Course # - Course Title: NWIT291 – Cybersecurity Capstone
Course Format: Lectures, discussions, weekly labs, team exercises
Class Day/Time:
Semester Period:
Location:

Instructor Contact Information:

Name:
Email:
Physical Office Hours:
Virtual Office Hours:

Montgomery College Course Description:

A culmination of cybersecurity and networking theory and practice. Students will combine knowledge and skills gained by implementing the eight CISSP domain topic areas into a fictitious organization. Students will learn how to apply the tools, techniques, and knowledge gained in the program in a practical real-world example. The course culminates with a formal capstone paper and presentation. The course also prepares students for the ISC2 Professional Security Certification(s).

Common Course Student Learning Outcomes

Upon the completion of this course, students will be able to:

- Demonstrate critical thinking and problem-solving skills on issues related to cybersecurity.
- Explain current policies and practices related to threats against network infrastructures.
- Describe legal, social, and ethical concerns related to securing information systems and networks.
- Explain the differences between internal and external threats and how to defend against each.
- Discuss the important principles and theories that are used within the cybersecurity field.
- Propose solutions for real-world cybersecurity problems.
- List the different environmental and physical controls that can be used to protect an IT environment.
- Interpret business continuity plans and risk assessment techniques and describe the strategies used when creating a risk management process.
- Explain security training for end-users and the methodologies and tools used for security education, training, and awareness (SETA).
- Describe security ramifications, technology weaknesses, configuration weaknesses, policy weaknesses and human errors.

Required Materials:

Textbook: CISSP Exam Cram, 4th Edition by Michael Gregg, Publisher: Pearson IT Certification, ISBN-13: 978-0789755537, ISBN-10: 078975553X.

Lab Manual: The instructor will also provide instructions for weekly hands-on.

Lab Use: Yes

MC Bookstore: <http://www.montgomerycollege.edu/bookstore>

Evaluation:

Cybersecurity Capstone Project	25 Points
Final Presentation with Demo (Technical Approach)	15 Points
Hands-On Labs	40 Points
Exams.....	20 Points
<hr/>	
Total Available Points	100 Points

Syllabus Copyright

© The contents of the syllabus, assignments, and lectures for this course are protected under the copyright laws of the United States. They are intended for the private use of students enrolled in this course / for this semester only and may not be reproduced in any way, shape, or form without the express written permission of the Cybersecurity program