Cyber Security and Information Science

WELCOME

INTRODUCTION, SYLLABUS REVIEW, AND COURSE DESCRIPTION

Cyber Security and Information Science

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I am excited to have you join me in this comprehensive journey into the world of cybersecurity. This course is designed to provide you with the foundational skills and knowledge necessary to excel as a cyber security administrator while also developing essential leadership abilities for the cyber security field.

WELCOME

Course Highlights:

- Technical Proficiency: Learn to configure, manage, and troubleshoot cyber security solutions.
- CCSA Certification Preparation: Gain the knowledge needed to pass the CCSA certification exam.
- Cyber Leadership Skills: Develop foundational leadership and management skills to navigate the dynamic cybersecurity landscape.

- Instructor Jeff Salter
- Email: <u>jcsalter@sc.edu</u>
- This semester I do not have an on-campus office, but I will be on campus for routine meetings. If you need to meet with me just let me know.

Course Description

This course provides students with the essential skills and training in information and cyber security leading to the option to complete the CCSA certification process through Check Point Software Technologies. Students will manage their own virtual network to learn how to manage modern day cyber security risks.

Learning Objectives

- 1. Explain and demonstrate how Check Point R81.20 Security Management products work and how they protect networks.
- 2. Produce the essential elements of a security policy (informed by the elements and capabilities of Check Point R81.20 Security Management).
- 3. Implement skills gained in a series of virtual networks.

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Learning Objectives

- 4. Enable application control and URL filtering software.
- 5. Upon application, students will articulate how this Intrusion Prevention System is configured, maintained, and tuned.
- 6. Administer an Infinity Threat Prevention System across networks.

Course Format

This is a fully online course. Online classes are not easier than face-to-face lecture classes. To succeed in an online class, you must be extremely motivated and well organized. You will need to download the required textbook by the first week of the course. Other course materials are available via Blackboard ("Bb"). Regular Internet access is essential for successful completion of the course.

The typical class structure will consist of learning modules, which include:

- Short Video/PowerPoint Lectures
- Readings
- Online Discussions
- Exams
- On-line virtual labs

Course Format

Online lectures will be provided through my website located here http://palmettocyber.org. Therefore, you must have access to the Internet to view/hear lectures. No special software is required.

The PowerPoint lecture presentations, links to articles, assignments, quizzes, and rubrics are located on the Blackboard site for the course.

Course Format

To participate in learning activities and complete assignments, you will need:

- Access to a working computer that has a current operating system with updates installed, plus speakers or headphones to hear lecture presentations (transcripts provided);
- Reliable Internet access and a USC email account;
- A current Internet browser that is compatible with Blackboard (Google Chrome is the recommended browser for Blackboard);
- Microsoft Word as your word processing program; and
- Comfortable using Windows Remote Desktop (RDP)

Course Materials

Required Textbook

Check Point Software Technologies. (2022). Check Point Certified: Security Administrator R81.10. Check Point Mind.

This manual is provided to students on the first day of class. It is proprietary so only currently enrolled students can access.

Any additional required readings and other course materials will be provided by the instructor.