



MCKENDREE
UNIVERSITY

The mission of McKendree University is to provide a high quality educational experience to outstanding students.

~Responsible Citizenship ~Engagement ~Academic Excellence ~Lifelong Learning~

CBD 332 – Cyber Defense Networking

Course Information

CBD 332 Cyber Defense Networking (3)

In this course you get an understanding of how to defend networks. This course will cover an overview of Network Security to include Firewalls, Intrusion-Detection System, Encryption, and Assessing & Hardening Systems.

Course Objectives

You'll learn how to harden operating systems, defend against malware and network attacks, establish robust security policies, and assess network security using industry-leading standards and models. You'll also find thorough coverage of key issues such as physical security, forensics, and cyberterrorism.

- Evaluate key network risks and dangers
- Choose the right network security approach for your organization
- Anticipate and counter widespread network attacks, including those based on “social engineering”
- Successfully deploy and apply firewalls and intrusion detection systems
- Secure network communication with virtual private networks
- Protect data with cryptographic public/private key systems, digital signatures, and certificates
- Defend against malware, including ransomware, Trojan horses, and spyware
- Harden operating systems and keep their security up to date
- Define and implement security policies that reduce risk
- Explore leading security standards and models, including ISO and NIST standards
- Prepare for an investigation if your network has been attacked
- Understand the growing risks of espionage and cyberterrorism

General Class Policies

McKendree values an environment that fosters mutual respect, responsible citizenship, and supportive educational opportunities. As a student in this course you are expected to support and uphold these ideas. There will be no tolerance for obscene language, name calling, or other disrespectful activity.

Participation

Students must participate in the class activities. Participation involves responding to the discussion questions, reading discussion question responses of other students, asking questions, and turning in all assignments.

Late Submission Policy

Students should complete their assignments on time. Late assignments will receive a 10% per day penalty. Please email, prior to the due date, if you are not able to complete the assignment on time.

Academic Integrity

Any student detected of academic dishonesty will receive the appropriate sanctions, which can include a failing grade ("F") for the course. In cases of serious violations, additional sanctions (such as academic probation or suspension) are possible.

Accommodations and ADA Policy

In accordance with the Americans with Disabilities Act (ADA), McKendree University provides services, auxiliary aids, and accommodations to meet the unique learning needs of students with disabilities.

Students with officially documented disabilities, medical needs, legal problems, or who are the victims of crimes may qualify for educational accommodations. A student requiring assistance should contact the McKendree Student Success and Advising Center (SSAC). The SSAC provides coordination and implementation of special accommodations for students with documented disabilities.

For further information regarding university or course policies, please consult with your instructor and/or refer to the catalog.

Assignment Grade Value

Assignment	Points per assignment	Total possible points	Weighed value
Discussion	10	80	8%

Scenarios	60	120	12%
Written Assignments	100	400	40%
Exams	200	400	40%
			100 %

Grading Scale

93-100%	A	77-79.9%	C+
90-92.9%	A-	74-76.9%	C
87-89.9%	B+	70-73.9%	C-
84-86.9%	B	60-69.9%	D
80-83.9%	B-	0-59.9%	F

Point Scale

Total points	Letter Grade
930-1000	A
900-929	A-
870-899	B+
840-869	B
800-839	B-
770-799	C+
740-769	C
700-739	C-
600-699	D
0-599	F

Course Schedule

THIS SYLLABUS IS SUBJECT TO CHANGE AT THE DISCRETION OF THE INSTRUCTOR

Module (Week)	Activities/Assignments	Due Date
1	Read Network Defense and Countermeasures Principles and Practices; Chapters 1 & 2 Participation Student Introduction Week 1 Discussion Assignments Writing Assignment #1	
2	Read Network Defense and Countermeasures Principles and Practices; Chapters 3 & 4 Participation Week 2 Discussion Assignments Writing Assignment #2	
3	Read Network Defense and Countermeasures Principles and Practices; Chapters 5 & 6 Participation Week 3 Discussion Assignments CVE Scenario	
4	Read Network Defense and Countermeasures Principles and Practices; Chapters 7 & 8 Participation Week 4 Discussion Assignments Mid-Term Exam	
5	Read Network Defense and Countermeasures Principles and Practices; Chapters 9 & 10 Participation Week 5 Discussion Assignments Writing Assignment #3	

6	<p>Read: Network Defense and Countermeasures Principles and Practices; Chapters 11, 12 & 13</p> <p>Participation Week 6 Discussion</p> <p>Assignments Open Source Software Scenario</p>	
7	<p>Read Network Defense and Countermeasures Principles and Practices; Chapters 14 & 15</p> <p>Participation Week 7 Discussion</p> <p>Assignments Writing Assignment #4</p>	
8	<p>Read Network Defense and Countermeasures Principles and Practices; Chapters 16 & 17</p> <p>Participation Week 8 Discussion</p> <p>Assignments Final Exam</p>	