

Nashville State Community College
Computer and Engineering Technologies Division
Computer Technology

Master Course Syllabus

CPT 2480 Tactical Perimeter Defense

3 Credits

3 Class Hours

An examination of how software and hardware can be used to provide a perimeter of defense in protecting resources, and how security is addressed in both wireless and wired networks. Topics include the use of tools such as wireless access points, proxy servers, VPN's, auditing, intrusion detection systems and firewalls.

Prerequisite(s): CPT 2425

Instructor Information:

Name:

Email:

Office Phone:

Office Location:

Office Hours:

Textbook and Other Materials:

Textbook: *Network Security, Firewalls, and VPNs, 2e* by J. Michael Stewart,
Jones & Bartlett Learning.
You will need the textbook and Virtual Lab Access

Online – Shopjblearning.com

Print Bundle

Print Text + Virtual Lab Access/eLab Manual

ISBN: 978-1-284-07432-1

eBundle

eBook Rental + Virtual Lab Access/eLab Manual

ISBN: 978-1-284-07431-4

Virtual Lab Access/eLab Manual ONLY

ISBN: 978-1-284-07428-4

College Bookstores

Print Bundle

Print Text + Virtual Lab Access/eLab Manual

ISBN: 978-1-284-07437-6

Textbook Only

ISBN 978-1-286-03167-6

Reference Materials: None
 Supplies: None

Course Outcomes:

Upon successful completion of this course, students should have an understanding of:

- Network Defense Fundamentals
- Advanced TCP/IP
- Router Fundamentals
- Fundamentals of Cisco Router Security
- Designing Firewalls
- Configuring Firewalls
- Managing Firewalls to Improve Security
- Implementing IPSec and Virtual Private Networks
- Designing Virtual Private Networks
- Intrusion Detection System Concepts
- Configuring and Using Intrusion Detection Systems
- Wireless Network Fundamentals
- Securing Wireless Networks

Course Competencies:

Scan for threats and vulnerabilities to a network
 Complete a penetration testing attack on a network server
 Analyze Ethernet packets moving on a network
 Implement a VPN
 Install an intrusion detection system
 Design a comprehensive network defense solution

Topics to Be Covered:

Network security threats and issues
 Network security implementation
 Network security management
 Firewall management and security
 VPN implementation and management
 Intrusion and detection implementation and management

Course Assessments:

The following performance assessments will be used to demonstrate students' understanding, knowledge and skills:

- Students will complete quizzes and exams to demonstrate their individual competency in the application of concepts used in the assigned exercises. Specific criteria for evaluation of these tests are included in the grading policy shown below.
- Students will perform as team members in the completion of case project exercises that require individual contributions to the team's solution. Criteria for performance will be based on established criteria that include all necessary components used in the solution of the exercise, as detailed in the grading policy below.

- Students' ability to ask and respond to questions will be measured through a series of assigned hands-on and productivity tasks completed both individually and in teams within required specifications. Criteria for evaluation of performance will include accurate and efficient application of technical skills and knowledge as well as appropriate behaviors and attitudes. For example, students will be observed to determine the degree to which they ask relevant questions, remain open to ideas, think critically, adapt what they know to new information, approach work with inventiveness and enthusiasm, use precise language when communicating, set and meet deadlines, and so on. Students will participate in scenarios; an observation tool (checklist or matrix) will be used to document findings. Team productivity grades will result from these observations.

Grading Policy

- Written assignments will periodically be assigned for you do outside of class. Along with the required reading on given topics from articles and/or the Internet, the homework will guide you and require summarizing key points, conducting research, answering questions or leading class discussions.
- The best experience for some will be knowledge gained from activities, events and class interactions. Be prepared by reading assigned topics before class and making notes. Cooperate with teams on group work, ask relevant questions, share experiences, delve deep into research and learning projects and respond when called upon. Bring your 3-ring folder with pockets to each class session as well as a writing instrument. Be willing to complete assigned tasks and though assistance may be required, making an effort and well as utilizing resources is essential.

Grading Scale:

Grades will be determined as follows (Average = Total points earned / Total points):

Grade	Average	Points
A	90 - 100	
B	80 - 89	
C	70 - 79	
D	60 - 69	

Attendance Policy

A student is expected to attend all scheduled classes and laboratories. Each instructor will formulate an attendance policy and provide it on the course syllabus. Absences are counted from the first scheduled meeting of the class, and it is the responsibility of each student to know the attendance policy of each instructor in whose class he/she is enrolled. If a student is absent from a class, he/she should give an advanced explanation to the instructor. Absences in a course may affect a student's final grade. The student is responsible for all assigned work in the course regardless of excused or unexcused absences. Tardiness may also affect a student's final grade.

Failure to attend class will result in a final course grade of "FA" or "FN" (see explanation below) depending on the individual instructor's course policy.

FA= failure, attendance-related (unofficial withdrawal) Last recorded date of attendance required.

FN= failure, never attended class (unofficial withdrawal)

Student Communication Channels

It is the student's responsibility to check D2L and MyNSCC email on a regular basis. These are the official communication channels between the college and students. Students are responsible for the information communicated through those channels. D2L contains specific course information and MyNSCC contains information important for other purposes.

Early Warning System

Nashville State Community College has implemented an Early Warning System to notify students via e-mail about academic problems such as poor classroom attendance, poor performance on assignments/tests, poor communication skills, late/missing assignments, and/or lack of classroom participation. Please note that Early Warning Alerts do not affect a student's academic standing.

ADA Compliance Statement

Nashville State complies with the Americans with Disabilities Act. Please contact the Access Services Coordinators at 615-353-3721 or 615-353-3741 if you would like to arrange ADA accommodations.

Classroom Misconduct

Nashville State Community College has a zero tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary sanctions. Please consult your Student Handbook for more specific details.

The instructor has primary responsibility for control over classroom behavior and maintenance of academic integrity. He/she can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or in conduct which violates the general rules and regulations of the College.

Disruptive behavior in the classroom may be defined as, but is not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, lap-top computers, games, etc.).

Please be aware that children are not allowed in class or unattended on campus.

Academic Dishonesty (Honor Code)

Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. "Plagiarism may result from: (1) failing to cite quotations and borrowed ideas, (2) failing to enclose borrowed language in quotation marks, and (3) failing to put summaries and paraphrases in your own words (A Writer's Reference 331). Academic dishonesty may be defined as, but is not limited to, intentionally trying to deceive by claiming credit for the work of another person, using information from a web page or source without citing the reference, fraudulently using someone else's work on an exam, paper, or assignment, recycling your own

work from another course, purchasing papers or materials from another source and presenting them as your own, attempting to obtain exams/materials/assignments in advance of the date of administration by the instructor, impersonating someone else in a testing situation, providing confidential test information to someone else, submitting the same assignment in two different classes without requesting both instructor's permission, allowing someone else to copy or use your work, using someone else's work to complete your own, altering documents, transcripts or grades, and forging a faculty/staff member's signature.

In addition to other possible disciplinary sanctions that may be imposed through regular college procedures as a result of academic dishonesty the instructor has the authority to assign an "F" or a "Zero" for the exercise, paper, or examination or to assign an "F" for the course. Students may appeal through the appropriate college grade appeal procedures.

Inclement Weather Policy

In the event of an inclement weather event, check the Nashville State web site home page at www.nsc.edu for announcements on campus closures. Campus closures will also be announced on local television stations (channels 2, 4, 5, and 17).

When classes are cancelled, an online assignment will be posted in NS Online. Check your NS Online email for a message from your instructor regarding your online assignment requirements. Even though classes may be cancelled, some areas, i.e. Testing Center, may be open. However, you should check before commuting to campus.

The Vice President for Academic Affairs and the Director of Security are responsible for cancellation decisions during an inclement weather event for the Nashville State main campus and the Southeast campus. Cookeville, Waverly, and Dickson Campus Directors will make class cancellation decisions based on conditions in their respective areas. Decisions about class cancellations are based on actual conditions, not forecasts. The perspective used for making decisions is that of the college as an employer, not as a K-12 institution. Students should use their own best judgment in determining whether to report to campus during inclement weather when classes are not cancelled.

NOTE: This syllabus is meant simply as a guide and overview of the course. Some items are subject to change or may be revised at the instructor's discretion. Each instructor will further clarify their criteria for grading, classroom procedures, attendance, exams and dates, etc. on his/her course syllabus.