

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Information Technology Systems</u>
COURSE RUBRIC AND NUMBER	<u>ITCC 2341</u>
COURSE TITLE	<u>CCNA Security</u>
COURSE CREDIT HOURS	<u>3 3 : 1</u> Credits Lec Lab

I. Catalog Description

Provides an overall security processes with particular emphasis on hand-on skills in the following areas: security policy design and management; security technologies, products, and solutions; and secure router design, installation, configuration, and maintenance; AAA and VPN implementation using routers and firewalls. Students must have successfully completed the training in the Cisco Networking Academy or have a CCNA certification. **(3:1).**

II. Course Objectives

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

- A. Explain network threats.
- B. Discuss mitigation techniques.
- C. Discuss the basics of securing a network.
- D. Explain how to secure administrative access on Cisco router using AAA.
- E. Explain how to implement firewall technologies to secure the network perimeter.
- F. Demonstrate how to configure an Intrusion Prevention System (IPS) to mitigate attacks on the network.
- G. Discuss how to implement endpoint and Layer 2 security features.
- H. Discuss how to implement secure virtual private networks.

III. THECB Learning Outcomes (WECM)

- 1. Explain network threats, mitigation techniques, and the basics of securing a network; secure administrative access on Cisco routers using AAA.
- 2. Implement firewall technologies to secure the network perimeter.
- 3. Configure IPS to mitigate attacks on the network.
- 4. Implement endpoint and Layer 2 security features.
- 5. Implement secure virtual private networks.

IV. Evaluation

- Ten exams will contribute 15% to the final grade.
- Lab assignments will contribute 20 % to the final grade.
- Skills Based Final will contribute 35% to the final grade
- A comprehensive Final Exam will contribute 30% to the final grade.

The final grade is based on a percentage of total points earned:

Percentage	Letter Grade
90 – 100	A
80 – 89.99	B
70 – 79.99	C
60 – 69.99	D
0 – 59.99	F

V. Disability Statement (Americans with Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.