

El Paso Community College
Syllabus
Part II
Official Course Description

SUBJECT AREA	<u>Information Technology Systems</u>
COURSE RUBRIC AND NUMBER	<u>ITCC 1340</u>
COURSE TITLE	<u>CCNA 2: Routing and Switching Essentials</u>
COURSE CREDIT HOURS	<u>3 3 : 1</u> Credits Lec Lab

I. Catalog Description

Describes the architecture, components, and basic operation of routers and explains the basic principles of routing and routing protocols. It also provides an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks. **Prerequisite: ITCC 1314. (3.1). Lab fee.**

II. Course Objectives (main title)

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

- A. Describe and explain basic switching concepts and the operation of Cisco switches.
- B. Describe the purpose, nature, and operations of a router, routing tables, and the route lookup process.
- C. Describe how VLANs create logically separate networks and how routing occurs between them.
- D. Describe dynamic routing protocols, distance vector routing protocols, and link-state routing protocols.
- E. Configure and troubleshoot static routing and default routing (RIP and RIPng).
- F. Configure and troubleshoot an Open Shortest Path First (OSPF) network.
- G. Configure and troubleshoot access control lists (ACLs) for IPv4 and IPv6 networks.
- H. Configure and troubleshoot Dynamic Host Configuration Protocols (DHCP) for IPv4 and IPv6 networks.
- I. Configure and troubleshoot Network Address Translation (NAT) operations.

III. THECB Learning Outcomes (WECM)

1. Configure and maintain routers and switches
2. Resolve common issues with routing protocols, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

IV. Evaluation

- There are 11 online exams that will contribute 10% to the final grade.
- There are Hands on Labs labs that will contribute 20% to the final grade.
- There is an online final exam that will contribute 35% to the final grade.
- There will be a skills exam that will contribute 35% to the final grade.

Grading Scale:

90 - 100	= A
80 - 89	= B
70 - 79	= C
60 - 69	= D
Below 60	= F
Incomplete	= I
Withdrawn	= W

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.

VII. Title IX and Sex Discrimination

Title 9 (20 U.S.C. 1681 & 34 C.F.R. Part 106) states the following "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance." The Violence Against Women Act (VAWA) prohibits stalking, date violence, sexual violence, and domestic violence for all students, employees and visitors (male and female). If you have any concerns related to discrimination, harassment, or assault (of any type) you can contact the Assistant to the Vice President for Student and Enrollment Services at 915-831-2655. Employees can call the Manager of Employee Relations at 915-831-6458. Reports of sexual assault/violence may also be reported to EPCC Police at 915-831-2200.