

# El Paso Community College

## Syllabus

### Part II

## Official Course Description

<b>SUBJECT AREA</b>	<u>Information Technology Systems</u>
<b>COURSE RUBRIC AND NUMBER</b>	<u>ITCC 2312</u>
<b>COURSE TITLE</b>	<u>CCNA 3: Scaling Networks</u>
<b>COURSE CREDIT HOURS</b>	<u>3      3 : 1</u> Credits   Lec   Lab

### I. Catalog Description

CCNA R&S: Scaling Networks (ScaN) covers the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches using advanced protocols. **Prerequisite: ITCC 1340. (3:1). Lab fee.**

### II. Course Objectives

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

- A. Explain enhanced switching technologies such as VLANs, Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Plus Protocol (PVST+), and EtherChannel.
- B. Configure enhanced switching technologies such as VLANs, Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Plus Protocol (PVST+), and EtherChannel.
- C. Troubleshoot enhanced switching technologies such as VLANs, Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Plus Protocol (PVST+), and EtherChannel.
- D. Explain first hop redundancy protocols (HSRP) in a switched network.
- E. Configure first hop redundancy protocols (HSRP) in a switched network.
- F. Troubleshoot first hop redundancy protocols (HSRP) in a switched network.
- G. Explain wireless routers and wireless clients.
- H. Configure wireless routers and wireless clients.
- I. Troubleshoot wireless routers and wireless clients.
- J. Configure routers in a complex routed IPv4 or IPv6 network using single-area OSPF, multiarea OSPF, and Enhanced Interior Gateway Routing Protocol (EIGRP).
- K. Troubleshoot routers in a complex routed IPv4 or IPv6 network using single-area OSPF, multiarea OSPF, and Enhanced Interior Gateway Routing Protocol (EIGRP).
- L. Manage Cisco IOS® Software licensing and configuration files.

### III. THECB Learning Outcomes (WECM)

1. Configure advanced routing and switching
2. Resolve common issues with OSPF, EIGRP, and STP in IP networks
3. Implement a WLAN in a small-to-medium network.

#### IV. Evaluation

- The online exams will contribute **10%** to the final grade.
- The assigned labs will contribute **10 %** to the final grade
- The final exam will contribute **35%** to the final grade.
- A skills final exam will contribute **45%** to the final grade.
- You are required to take both the Hands-on Skills Final and the Online Final. Missing either will result in failing the course.

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.

#### 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.