El Paso Community College
Syllabus
Part II
Official Course Description

SUBJECT AREA   **Information Technology Systems**

COURSE RUBRIC AND NUMBER   **ITCC 2308**

COURSE TITLE   **Cisco Exploration 3 LAN Switching and Wireless**

COURSE CREDIT HOURS   **3   3   :   1**
                                                    Credits   Lec   Lab

I.   Catalog Description

Helps students develop an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks. Provides detailed explanations of LAN switch operations, VLAN implementation, Rapid Spanning Tree Protocol (RSTP), VLAN Trunking Protocol (VTP), Inter-VLAN routing, and wireless network operations. Analyze, configure, verify, and troubleshoot VLANs, RSTP, VTP, and wireless networks. Introduces campus network design and Layer 3 switching concepts. **Prerequisite: ITCC 1304. (3:1).**

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.   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

IV.   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).

V.   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.