



WACO, TEXAS

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**CISCO DISCOVERY 2:  
WORKING AT A SMALL-TO-MEDIUM BUSINESS OR ISP  
ITCC 1311  
COURSE SYLLABUS**

REVISED: 09-10

CISCO DISCOVERY 2:  
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ITCC 1311

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**Course Description:**

This course prepares students for jobs as network technicians. It also helps students develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide e-mail services, Web space, and authenticated access. Students also learn about soft skills required for help desk and customer service positions. Network monitoring and basic troubleshooting skills are taught on context. This is the second course in the four course series preparing students for the CISCO Certified Network Administrator certification. Semester Hours 3 (2 lec/3 lab)

**Prerequisites and/or Corequisites:**

Prerequisite: ITCC 1310

**Required Text & Material:**

- A. Working at a Small-to-Medium Business or ISP: CCNA Discovery Learning Guide with CDROM by Allen Reid and published by CISCO Press. ISBN 97781587132100
- B. CCNA Portable Command Guide 2<sup>nd</sup> Edition by Scott Empson and published by CISCO Press. ISBN10 1-58720-193-3 /ISBN13 978-1-58720-193-6
- C. USB drive: 2GB or better to store Packet Tracer Programs and files

**Course Objectives and/or Competencies:**

- A. Course Objective: Describe the structure of the Internet and how Internet communications occur between hosts; install, configure, and troubleshoot Cisco IOS® devices for Internet and server connectivity; plan a basic wired infrastructure to support network traffic; implement basic WAN connectivity using Telco services; monitor network performance; isolate failures; demonstrate proper disaster recovery procedures; perform server backups; and use the OSI and TCP/IP models and the process of encapsulation to troubleshoot problems using an organized, layered procedure.

B. Course Competencies: Upon completion of ITCC 1311, students will be able to:

1. Subnet a Network
2. Configure Network Devices
3. Configure an ISR with SDM Express
4. Configure Basic Router Settings with the Cisco IOS CLI
5. Configure DHCP with SDM and the Cisco IOS CLI
6. Manage Router Configuration Files Using HyperTerminal
7. Manage Router Configuration Files Using TFTP
8. Plan a WAN Upgrade
9. Configure the Cisco 2960 Switch
10. Create a Network Diagram from Routing Tables
11. Configure and Verify RIP
12. Configure BGP with Default Routing
13. Edit the HOSTS File in Windows
14. Examine Cached DNS Information on a Windows DNS Server
15. Create Primary and Secondary Forward Lookup
16. Secure Local Data and Transmitted Data
17. Plan for Access Control Lists and Port Filters
18. Research Anti-X Software Products
19. Interpret a Service-Level Agreement
20. Conduct a Network Capture with Wireshark
21. Manage Remote Network Devices with Telnet
22. Configure a Remote Router Using
23. Plan a Backup
24. Manage Cisco IOS Images with TFTP
25. Manage Cisco IOS Images with ROMmon and TFTP
26. Organize CCENT Objectives by OSI Layer
27. Use Wireshark to Observe the TCP Three-Way Handshake
28. Identify Cabling and Media Errors
29. Troubleshoot LAN Connectivity
30. Troubleshoot WAN Connectivity
31. Design an IP Subnetting Scheme for Growth
32. Correct RIPv2 Routing Problems
33. Use Telnet and SSH to Access Networking Devices
34. Identify Necessary Knowledge, Skills, and Abilities
35. Describe how to Explore the CCNA Prep Center

C. Evaluation:

1. Written objective and/or subjective exams
2. Practical laboratory exams
3. Class discussion and participation
4. Homework and class assignments
5. Attitude and work habits

**MCC Attendance Policy:**

Regular and punctual attendance is expected of all students, and each instructor will maintain a complete record of attendance for the entire length of each course, including online and hybrid courses. Students will be counted absent from class meetings missed, beginning with the first official day of classes. Students, whether present or absent, are responsible for all material presented or assigned for a course and will be held accountable for such materials in the determination of course grades. In the case of online and hybrid courses, attendance will be determined in terms of participation, as described in the course syllabus.

Absence from 25 percent of scheduled lecture and/or laboratory meetings will be taken as evidence that a student does not intend to complete the course, and the student will be withdrawn from the course with a grade of W. The instructor may reinstate the student if satisfied that the student will resume regular attendance and will complete the course. If the student's 25 percent absences are reached after the official drop date, the instructor may assign a W, if the student is passing and requests to be withdrawn. However, if a student who is not passing reaches the 25 percent point after the official drop date, the student will receive an F. In extenuating circumstances, the instructor may assign a W to a student who is not passing.

Each absence will count toward attendance requirements in each course.

Students will be permitted to make up class work and assignments missed due to absences caused by (1) authorized participation in official College functions, (2) personal illness, (3) an illness or a death in the immediate family, or (4) the observance of a religious holy day. Also, the instructor has the prerogative of determining whether a student may make up work missed due to absences for other reasons. It is the student's responsibility to inform the instructor of the reason for an absence and to do so in a timely fashion.

#### Student Absences on Religious Holy Days

McLennan Community College shall excuse a student from attending classes or other required activities including examinations for the observance of a religious holy day, including travel for that purpose. Students are required to file a written request with each instructor for an excused absence. A student whose absence is excused for this observance may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. Religious holy day means a holy day observed by a religion whose places of worship are exempt from property taxation under the Texas Tax Code. McLennan Community College may not excuse absences for religious holy days which may interfere with patient care.

Note: Students interested in seeing the class attendance policy in its entirety should check the Highlander Guide or the MCC policy manual.

**ADA Statement:**

In accordance with the requirements of the Americans with Disabilities Act (ADA), and the regulations published by the United States Department of Justice 28 C.F.R. 35.107(a), MCC's designated ADA co-coordinators, Mr. Gene Gooch - Vice President, Finance and Administration and Dr. Santos Martinez – Vice President, Student Services shall be responsible for coordinating the College's efforts to comply with and carry out its responsibilities under ADA. Students with disabilities requiring physical, classroom, or testing accommodations should contact Mr. Marcus Sweatt, Disabilities Specialist, at 299-8122 or [msweatt@mclennan.edu](mailto:msweatt@mclennan.edu).

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Course Competencies	Workplace Competencies															Foundation Skills																				
	Resources				Interpersonal					Information				Systems			Technology			Basic Skills					Thinking Skills					Personal Qualities						
	A	B	C	D	A	B	C	D	E	F	A	B	C	D	A	B	C	A	B	C	A	B	C	D	E	A	B	C	D	E	F	A	B	C	D	E
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