

EDC103 Working at a Small-to-Medium Business or ISP Course Syllabus

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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 in context.

Textbook:

Required: Working at a Small-to-Medium Business or ISP, CCNA Discovery Learning Guide, By Allan Reid, Jim Lorenz, Published by Cisco Press. ISBN: 1587132109 / ISBN 13: 9781587132100, Published: Nov 30, 2007; Copyright 2008, Dimensions 8-1/2x10-7/8; Pages: 600; Edition: 1st.

Optional: CCENT/CCNA ICND1 Official Exam Certification Guide (CCENT Exam 640-822 and CCNA Exam 640-802), ISBN-10: 1-58720-182-8; ISBN-13: 978-1-58720-182-0; Published: Aug 29, 2007; Copyright 2008; Dimensions 7-3/8x9-1/8; Pages: 696; Edition: 2nd.

Computing Resources

The completion of this course requires the student to have personal computing resources readily available. The students will need internet access to read the curriculum and complete assignments for homework. "Packet Tracer" is simulation software, will be provided to the students, and will be used extensively to complete assignments. [Packet Tracer 5 FAQ](#)

Prerequisites

The completion of this course requires the successful completion of CET101 and CET102, CompTIA A+ Certification or permission of instructor.

Instructional Philosophy: This course requires extensive student reading, completion of written assignments and completion of hands-on laboratory projects. There will be a balance of lecture and demonstration throughout the course.

The course presentation is designed to continually reinforce the material covered each week on approximately a module per week schedule. Typically 1 or 2 labs are completed for each Module and each lab has a set of review questions used to evaluate the completion of the lab. A module assessment is completed following a brief review.

The assessment for the course will be divided between the written homework assignments and module tests.

Course Goals

- Help students recognize the significant impact of networking on their lives
- Teach students how to build and support a home or small business network with Linksys equipment
- Instill a sense of awe in students and encourage them to learn more about how things work and to pursue careers in networking
- Prepare students for entry-level jobs in the industry by employing interactive and engaging instructional approaches that help them gain practical experience
- Teach students the fundamental concepts of networking
- Provide opportunities for extensive hands-on interaction with PC and networking equipment to prepare students for careers and certification exams
- Establish the relevancy and context of networking in our everyday lives. In addition, the course provides instruction and training in the proper care, maintenance, and use of networking software, tools, and equipment.
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Major Course Projects and Assignments

Upon completion of the Networking for Home and Small Businesses course, students will be able to perform the following tasks:

- Describe the structure of the Internet and how communication occurs between hosts
- Install, configure, and troubleshoot Cisco IOS devices for Internet and server connectivity
- Plan a basic wired infrastructure to support network traffic
- Configure a server to share resources and provide common Web services
- Implement basic WAN connectivity using Telco services
- Demonstrate proper disaster recovery procedures and perform server backups
- Monitor network performance and isolate failures
- Troubleshoot problems using an organized, layered procedure
- Describe the OSI model and the process of encapsulation

1. Technical Performance Projects. Module Laboratory Assignments will be completed throughout the duration of the course:

2. Applied Academics Projects. For each of the modules, the student's will be responsible for reading the module and completing the end-of-module review assignments. Weekly lectures, labs, and a test are completed to finalize the material in each module.

3. Problem Solving Projects. The student's will develop and practice their problem solving skills by completing labs. The various problems and issues that are presented serve as effective means for the students to develop broad-based, practical troubleshooting skills required to tackle any networking issue.

Course Assessment Plan

Late Work: NO LATE WORK WILL BE ACCEPTED!!!

Make-ups: There will be no make-up tests unless previously arranged with the instructor.

Attendance: In accordance with the course catalog.

Grade Performance Standard

Performance Standards: Grades for the course will be based on the following levels of performance:

A. Independent Learner

Did research, designed and planned; applied academic skills; evaluated work and made adjustments; did quality work; needed little help from the teacher; sought and found resources independently; displayed a positive attitude; demonstrated knowledge with a grade of 90 or higher.

B. Semi-Independent Learner

Did research, designed and planned; needed some help from the teacher; did quality work with a few flaws; needed feedback from the teacher to realize work could use improvement; redid work to meet standards; displayed a generally positive attitude; demonstrated knowledge with a grade of 80 or higher.

C. Dependent Learner

Needed help to research, design and plan or had to be given a plan; relied a great deal on the teacher; had to be given procedures for performing tasks; required significant help to produce a quality product; needed help to evaluate a product; final product still did not meet standards; attitude displayed could use improvement; demonstrated knowledge with a grade of 70 or higher.

D. Highly Dependent Learner

Needed significant help to research, design and plan or had to be given a plan; relied a solely on the teacher; had to be given procedures for performing tasks; could not produce a quality product independently; needed help to evaluate a product; final product still did not meet standards; poor attitude; demonstrated knowledge with a grade of 65 or higher.

F. Failure

Did not complete assignments; if assignments were completed, they were of such low quality that they did not pass; failed to follow procedures; did not show criteria for determining quality; behavioral problem; scored less than 65 on knowledge tests; produced a poor or no portfolio.

Assessment Description

Percent of Grade

Tests	40
Labs	40
Homework	20

Tests will be scheduled on the assessment server for 7 days each week with appropriate time limits. It is the student's responsibility to take, or in some cases re-take, scheduled tests.

The instructor reserves the right to change any portion of this syllabus at any time.