Course Description

INF-265 Networking Configuration 1 – 3 credits

This course provides students the skills required to design, build and configure small to medium sized networks using Cisco routers. Students are provided with classroom and laboratory experience using the latest networking technology. Topics include networking concepts, LAN and WAN implementation, wireless networking and custom subnet masking. This course assists in preparation towards the Cisco CCNA certification. Lecture 2  Laboratory 2  Prereq: INF-160

Student Learning Objectives

As a result of meeting the requirements of this course students will be able to:

<table>
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<tr>
<th>Objective</th>
<th>Measure</th>
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<tbody>
<tr>
<td>1. Configure an interface on a Cisco router</td>
<td>Project/Lab/Exam</td>
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<tr>
<td>2. Configure static routes on a Cisco router</td>
<td>Project/Lab/Exam</td>
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<tr>
<td>3. Configure dynamic routing protocols on a Cisco router</td>
<td>Project/Lab/Exam</td>
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<td>4. Configure correct addresses on a Cisco Router</td>
<td>Project/Lab/Exam</td>
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<td>5. Design subnets for network efficiency</td>
<td>Project/Lab/Exam</td>
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<td>6. Develop custom subnet masks</td>
<td>Project/Lab/Exam</td>
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<tr>
<td>7. Construct a working Local Area Network</td>
<td>Project/Lab/Exam</td>
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Course Texts

LabSim Cisco CCNA 640-802 software

ISBN: 987-1-935080-00-8

Course Content
This course will train the student to manage and configure network switches and routers. The student will learn the theory of router and switch operation and then through hands on laboratory exercises will demonstrate the ability to configure and maintain the device. Student will program switches and routers, configure local and wide area networks and create subnets using subnet masking.

**Special Features of the Course**

This course will be taught using special software from LabSim which simulates actual switch and router interfaces. It is therefore essential that the student complete ALL the lab exercises and exams in the sections assigned.

**Grading Policy**

Student must complete ALL the LabSim lab exercises and exams for the sections assigned.

There will also be several instructor exams.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tr>
<td>LabSim labs and exams</td>
<td>50%</td>
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<tr>
<td>Instructor Exams</td>
<td>50%</td>
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**Laboratory Work:**

Laboratory assignments are hands-on productions that show the instructor that the student can competently use specified software. It is important that the student attend all lab sessions. The student should read the scheduled assignment in the text prior to coming to lab class.

It is anticipated that students will spend at least 4-hours per week in the free-time computer room perfecting their skills and completing their lab assignments. The lab assignments are required for grading. They must be submitted as the student enters the lab on the assignment due date, and cannot be handed in late. Certain lab assignments will be given and completed during one lab session. In this case, the student must submit the assignment upon exiting the lab. Laboratory assignments that were not collected before the end of lab must be completed during free time.

**Homework:**

In addition to any homework assignment given during class, it is a standing assignment that the student read each chapter of the book prior to its discussion. Following the class discussion, the student should reread the material and work with the exercises throughout the text. It is anticipated that students will spend at least 4-hours per week reading the text and working with the exercises and supplemental resources.

**Policies:**

- Lateness – The roll will be taken at the beginning of class. If the student is not in attendance at that time, he/she will be carried in the roll book as being absent unless the instructor is notified immediately after class. Attendance sheets cannot be adjusted at following class meetings.
• The student must adhere to all college policies. Due to the nature of this course, it is recommended that the student review the policy titled “Acceptable Information Technology Use at Bergen Community College”.
• The use of portable electronic devices such as pagers and cell phones is not permitted while class is in session. Please be sure to silence electronic devices before entering class.
• The use of audio CD or tape players, radios, and college computers to play music during class is prohibited.
• Students are expected to demonstrate listening, reading, note taking, and writing skills. The student will need to take notes during class discussions and understand and follow verbal and written directions. All assignments and correspondence with the instructor (including e-mail) must be well written in full sentence format. Proper paragraph format must be used for all postings to the student bulletin board (if applicable).
• The subject line of all e-mail correspondence to the instructor must contain the course number and section and student’s name. Any e-mail received without this information will not be opened.
• Plagiarism in any form will be treated as a failure to complete an assignment. All work submitted should reflect individual effort by the student.
• In borderline cases that arise in almost every class each semester a student’s attendance, class participation, attitude, and observed effort will be considered in helping to determine the student’s final grade.

If the instructor does not appear after 20 minutes following the scheduled time, students should generate an attendance list. One volunteer member need deliver the list, containing the course title, date, and instructor’s name, to the Evening Office L-113 or to the Divisional Office (during the day) A-306C.

Additional policy and assessment information may be distributed by individual instructors.