

**OAKTON COMMUNITY COLLEGE
GENERIC COURSE SYLLABUS**

I.	<u>COURSE PREFIX</u>	<u>COURSE NUMBER</u>	<u>COURSE NAME</u>	<u>CREDIT</u>	<u>LECTURE</u>	<u>LAB</u>
	CNS	142	CISCO Principles of Internet Routing	4	3	2
	(Formerly CNA 112)					

II. PREREQUISITE:

CNS 141 (Formerly CNA 111); a passing grade must be registered on the Cisco Assessment Server

III. COURSE (CATALOG) DESCRIPTION:

This is the second Cisco Networking Academy course and will extend the OSI layer concepts. The course will concentrate on routing and will deal with routers and router configuration using IOS. Routers will be physically configured within networks and programmed during laboratories. IOS, TCP/IP and IP addressing will be studied.

IV. LEARNING OBJECTIVES:

The student should obtain a greater depth of understanding of the OSI seven-layer model and WAN structures. The student will be able to configure small WAN networks using routers and program the routers using IOS. The student will also understand IP addressing and various routing protocols.

V. ACADEMIC INTEGRITY

Students and employees at Oakton Community College are required to demonstrate academic integrity and follow Oakton's Code of Academic Conduct. This code prohibits:

- cheating
- plagiarism (turning in work not written by you, or lacking proper citation)
- falsification and fabrication (lying or distorting the truth)
- helping others to cheat
- unauthorized changes on official documents
- pretending to be someone else or having someone else pretend to be you
- making or accepting bribes, special favors, or threats, and
- any other behavior that violates academic integrity.

There are serious consequences to violations of the academic integrity policy. Oakton's policies and procedures provide students a fair hearing if a complaint is made against you. If you are found to have violated the policy, the minimum penalty is failure on the assignment and, a disciplinary record will be established and kept on file in the office of the Vice President for Student Affairs for a period of 3 years.

Details of the Code of Academic Conduct can be found in the Student Handbook.

VI. OUTLINE OF TOPICS:

- The OSI reference model
- LAN's: Layers 1,2,3
- LAN's: Layers 4,5,6,7
- WANS
- Routing
- Using Routers
- Router Components
- Router startup and setup
- Router Configuration
- IOS
- TCP/IP
- IP addressing
- Routing Protocols

VII. METHODS OF INSTRUCTION:

A combination of lectures, lab, and on-line activities will be used to master the material.

VIII. COURSE PRACTICES REQUIRED:

All Cisco lessons and chapter tests must be completed as well as the assigned laboratories. Reading material from supplemental sources as assigned must be read and a structured journal is kept.

IX. INSTRUCTIONAL MATERIALS:

Course Technology CCNA books.

X. METHODS OF EVALUATING STUDENT PROGRESS:

All assigned work must be completed and the Cisco on-line final examination must be passed. Failure to pass the Cisco final exam will keep the student from being able to register for the next course in the sequence.

XI. OTHER COURSE INFORMATION:

The student will be expected to work outside of class on the Cisco on-line material. Instructor contact will be available via e-mail and Webboard.

If you have a documented learning, psychological, or physical disability you may be entitled to reasonable academic accommodations or services. To request accommodations or services, contact the ASSIST office in the Learning Center. All students are expected to fulfill essential course requirements. The College will not waive any essential skill or requirement of a course or degree program.