

**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	141	CISCO Introduction to Internetworking	4	3	2
		(Formerly CNA 111)				

II. PREREQUISITE:

None

III. COURSE (CATALOG) DESCRIPTION:

This is the first course in the Cisco Networking Academy sequence of four courses. This course introduces networking and general network concepts and builds the fundamental laboratory skills in wiring and testing. The course introduces the seven-layer OSI model and the concepts involved with routing and routing protocols.

IV. LEARNING OBJECTIVES:

By the end of this course the student should understand the fundamental OSI layer structure as well and the general function of each layer. The student will achieve basic wiring and cable making skills with knowledge of LAN layout. The student should understand the electrical fundamental of data transmission and how the data moves in the networks.

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 Basics of computing
- Local area networks (LANs)
- Layer 1 - Electronics and signals
- Layer 1 - Media, Connections, collisions
- Layer 2 - Concepts
- Layer 2 - Technologies
- Design and Documentation
- Layer 3 - Routing and addressing
- Layer 3 - Routing protocols
- Layer 4 - Focus on TCP/IP
- Layer 5 - The session layer
- Layer 6 - The presentation layer
- Layer 7 - The application layer

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.