OAKTON COMMUNITY COLLEGE
GENERIC COURSE SYLLABUS

I.

COURSE PREFIX	COURSE NUMBER	COURSE NAME	CREDIT	LECTURE	LAB
CNS	145	CISCO Fundamentals of	4	3	2
(Formerly CNA 121)		Wireless Networking			

II. PREREQUISITE:

CNS 142 (formerly CNA 112) or consent of instructor, coordinator or program chair

III. COURSE (CATALOG) DESCRIPTION:

This course will prepare students to achieve the Cisco Wireless LAN Support Specialist Designation. Course will focus on the design, planning, implementation, operation and troubleshooting of wireless LANs.

IV. LEARNING OBJECTIVES:

Upon completion of this course, the student will have an understanding of:

- Wireless radio technologies and topologies.
- IEEE 802.11 wireless standards
- Configure and install wireless access points, bridges, adapters, and antennas.
- Wireless design, installation, configuration, monitoring and maintenance using CLI and web-based Device Manager
- Identify wireless security threats and vulnerabilities
- Configure monitoring technologies such as Syslog, SNMP
- Troubleshooting wireless installation and configuration.

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:

- Introduction to Wireless LANs
- 802.11 (a,b,& g) and Network Interface Cards
- Wireless Radio Technology
- Wireless Topologies
- Access Points
- Bridges
- Antennas
- Security
- Application Design and Site Survey Prep
- Site Survey
- Troubleshooting, Management, Monitoring and Diagnostics
- Emerging Technologies
- Certification Review

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 examinations must be passed.

XI. OTHER COURSE INFORMATION:

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.