Date Adopted: August 2015 Date Reviewed: August 2015

Date Revised:

CIS 271 CISCO CCNA II

I. CIS 271 CISCO CCNA II – 3 Semester Hours

II. Course Description

Students will comprehend foundational knowledge in obtain a solid background in basic Cisco networking concepts. Students are first introduced to theory-based concepts, which are followed-up with practical hands-on labs.

III. Prerequisite

CIS 270

IV. Textbook

Textbook: Cisco CCENT/CCNA ICND1 100-101 Academic Edition

Publisher: Cisco Press Author: Odem, Wendell

V. Course Objectives

- 1. Understanding Advanced IPv4 networks
- 2. Understanding IPv4 Services
- 3. Understanding of IPv6 networks

VI. Course Outline of Topics

- 1. Understanding Advanced IPv4 networks
 - a. Configuring IPv4 Addresses and Routes
 - b. Learning Ipv4 routes with OSPFv2
 - c. Configuring and verifying host connectivity
 - d. Designing subnets
 - e. Variable-length subnet masks
 - f. Route summarization
- 2. Understanding IPv4 Services
 - a. IPv4 control lists
 - b. Advanced IPv4 ACLs and device security
 - c. Network address translation
- 3. Understanding of IPv6 networks
 - a. Fundamentals of IPv6
 - b. IPv6 addressing and subnetting
 - c. Implementing IPv6 addressing on routers and hosts
 - d. Implementing Ipv6 routing

VII. Evaluation and Assessment

Evaluation and assessment will be determined by the instructor and specified on the

instructor's class syllabus. Grades will be based upon following scale: A = 90 - 100%, B = 80 - 89%, C = 70 - 79%, D = 60 - 69%, and F = below 60%.

VIII. Attendance

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

IX. Statement on Discrimination/Harassment

The College and the Alabama State Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

X. Americans with Disabilities

The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College. The ADA Accommodations Office is in FSC 305 (205-856-7731).