COURSE TITLE & NUMBER: Networking Fundamentals: CNT 1010
CREDITS: 3 (2 Lec/1 Lab)
PREREQUISITES: ITNS1550 A+ Certification Prep or instructor consent. Web browsing experience helpful for browsing online curriculum from web server and taking online web based exams. Basic mathematical operations of whole numbers, percentages and exponents are desired.

CATALOG DESCRIPTION:
Networking Fundamentals covers networking architecture, structure, and functions. The course introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum.

OUTLINE OF MAJOR CONTENT AREAS:
1. Explore the Network
2. Configure a Network Operating System
3. Network Protocols and Communications
4. Network Access
5. Ethernet
6. Network Layer
7. IP Addressing
8. Subnetting IP Networks
9. Transport Layer
10. Application Layer

COURSE GOALS/OBJECTIVES/OUTCOMES:
1. Students will explain network technologies.
2. Students will explain how devices access local and remote network resources.
3. Students will explain how switching operates in a small to medium-sized business network.
4. Students will design an IP addressing scheme to provide network connectivity for a small to medium-sized business network.
5. Students will configure initial settings on a network device.
6. Students will implement basic network connectivity between devices.
7. Students will configure monitoring tools available for small to medium-sized business networks.

HCC COMPETENCIES MET:
Working Productively and Cooperatively
Thinking Creatively and Critically

STUDENT CONTRIBUTIONS:
The student is expected to attend class regularly, participate in class discussion, complete assignments, and laboratory or design projects. The student must spend sufficient time to complete assignments.

*Curriculum Committee Approval Date: April 3, 2018*

*AASC APPROVAL DATE: April 18, 2018  
REVIEW DATE: April 2023*