### ELEC 1500: Networking I

#### A. COURSE DESCRIPTION

- **Credits:** 3
- **Lecture Hours/Week:** 2
- **Lab Hours/Week:** 2
- **OJT Hours/Week:** *.*
- **Prerequisites:** None
- **Corequisites:** None
- **MnTC Goals:** None

This course provides an introduction to network systems. The student will learn about the basic concepts, terminology, equipment, and the techniques that are needed in the development of a data communication system. The protocols used for typical data exchange will be explored in a lab environment. This is semester one of the Cisco curriculum. (Prerequisites: None.) (3 credits: 2 lecture/1 lab)

#### B. COURSE EFFECTIVE DATES: 07/01/2010 - Present

#### C. OUTLINE OF MAJOR CONTENT AREAS
D. LEARNING OUTCOMES (General)

1. Analyze local area network components
2. Identify analog transmission
3. Identify WAN
4. Identify digital transmission
5. Analyze network function
6. Identify ISO/OSI network model
7. Analyze terminology
8. Analyze network topologies
9. Identify star topology
10. Categorize network standards
11. Identify data units
12. Identify network appliances
13. Identify bus topology
14. Analyze TCP/IP portocol
15. Develop network plan
16. Build LAN
17. Check LAN
18. Identify network class
19. Associate hub functions
20. Apply category five terminations
21. Troubleshoot LAN
22. Associate bridge functions
23. Understand basic IOS
24. Associate router functions

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted