A. Course Description

- **Credits:** 3.00
- **Lecture Hours/Week:** 2.00
- **Lab Hours/Week:** 1.00
- **OJT Hours/Week:** 0
- **Prerequisites:** None
- **Corequisites:** None
- **MnTC Goals:** None

This course exposes students to networking concepts, technologies, and typical network administration/analysis duties found in the workplace. Topics covered include communication models, network protocols, IP addressing and subnetting, physical and logical topologies, transmission media, and network hardware.

B. **Course Effective Dates:** 8/2/19 – Present

C. **Outline of Major Content Areas**

   As noted on course syllabus

D. **Learning Outcomes**

1. Explain the function of each layer of the TCP/IP and OSI models.
2. Design an addressing and subnetting scheme for a routed IP network.
3. Describe the relationship between IP and MAC addresses.
4. Examine physical network and logical topology diagrams.
5. Describe the role and function of routers and switches
6. Identify common connectivity issues.
7. Compare LAN, WAN, and WLAN (WiFi) technologies.
8. Identify standard cable types.
9. List the characteristics of common logical network topologies.
10. Identify commonly used TCP and UDP ports.

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

F. **Learner Outcomes Assessment**
As noted on course syllabus

G. Special Information

None noted