

Minnesota State University Moorhead

CSIS 349L: Networking and Data Communications Lab

A. COURSE DESCRIPTION

Credits: 1

Lecture Hours/Week: 0

Lab Hours/Week: 1

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: CSIS 349

MnTC Goals: None

Lab to accompany CSIS 349: Networking and Data Communications. Taken concurrently with CSIS 349, provides the following: A study of how TCP/IP protocol software functions and interacts to facilitate communication across an internet. The Client/Server Model, its service techniques, efficiency and security issues are investigated in detail. Programming project(s) required.

B. COURSE EFFECTIVE DATES: 02/01/2015 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. The Socket API
2. Sending and receiving UDP datagrams
3. Establishing and using a TCP connection
4. Various application layer protocols on top of UDP and TCP, such as HTTP

D. LEARNING OUTCOMES (General)

1. Be aware of and able to respond to network security issues.
2. Describe how network and transport layers in general work and how TCP/IP works.
3. Have working knowledge of application layer protocols.
4. Understand protocol stack.
5. Understand several protocols that sit above TCP or IP on the protocol stack.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted