

COURSE SYLLABUS  
Southeast Missouri State University

Department of Industrial & Engineering Technology

Course No: ET-462/562

Title of Course: Networking I

Revision: Spring 2000

- I. Catalog Description and Credit Hours of Course: A study of basic knowledge, physical layer, data link layer, network layer, transport layer, transport control protocol/internet protocol fundamentals, remote connectivity and security of networks. This course will also focus on implementing the installation of a network, administering the network, maintaining and supporting the network, identifying, assessing and responding to problems, and troubleshooting the network. (3 credit hours)
- II. Prerequisite (s): ET- 364/PH-305 or Permission of Instructor
- III. Purpose or Objectives of the course: Upon completion of this course, the students should be able to:
  - A. describe physical layer, data link layer, network layer, transport layer concepts.
  - B. demonstrate knowledge of transport control protocol/internet protocol fundamentals.
  - C. explain remote connectivity concepts.
  - D. implement the installation of a network.
  - E. maintains, support and troubleshoot networks.
- IV. Expectations of Students:
  - A. Students will be expected to attend class regularly and be responsible for all information presented in class.
  - B. Students will be expected to participate and contribute to the class as appropriate.
  - C. Students will be expected to perform satisfactorily on all assignments. (No credit for late work or handwritten assignments).
  - D. Students will be expected to take all examinations on assigned dates.

- E. **Students taking this class for graduate credit will create a design project, and present it to the rest of the class before finals week.**
- V. Course Content or Outline (Indicate number of class hours per unit or section):
- A. **On the Internet (Weeks):**
1. Networking Fundamentals (1-2)
  2. Hardware required to Operate a Local Area Network (3-4)
  3. Data transmission on a Network (5-6)
  4. Managing the Network (7-8)
  5. EXAM (Cisco Semester 1 Exam)
  6. Router configurations and internet protocol addressing (9-16)
  7. EXAM (Cisco Semester 2 Exam)
- B. **In Class (Class Period):**
1. Basic Knowledge of Networking Technology (1)
  2. Physical Layer (2)
  3. Data Link, Network, and Transport Layers (3)
  4. Transport Control Protocol/Internet Protocol Fundamentals (4)
  5. Transport Control Protocol/Internet Protocol Suite Utilities (5)
  6. Remote Connectivity (6)
  7. Network Security (7-8)
  8. Network Implementation (9-10)
  9. Administering the Change Control System (10-11)
  10. Maintaining and Supporting the network (11-12)
  11. Identifying, Assessing, and Responding to Problems (12-13)
  12. Troubleshooting the Network (14-15)
- VI. Textbook (s) and/or Other Required Materials or Equipment:
- Network+ Certification Study Guide, McGraw Hill, (1999) ISBN: 0-07-211846-6
- VII. Basis for Student Evaluation: Students will be evaluated based upon the following basis.
- A. Written Exams (60%)
- B. Lab Assignments (10%)
- C. Quizzes, papers and presentations (30%)
- D. Grading scale:
1. 90-100 = A
  2. 80 - 89 = B
  3. 70 - 79 = C
  4. Below 70% = F

VIII. Disabilities Statement: If you have special needs addressed by the Americans With Disabilities Act and need course materials in alternative format, notify your course instructor immediately. Reasonable efforts will be made to accommodate your special needs.