Course Syllabus
Southeast Missouri State University

Department of Industrial Technology  Course Number:  ET-100

Title of Course:  Networking Fundamentals and  Revision:  Fall 99
Router Technologies

Instructor:  Dr. Raj Desai
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I. Catalog Description and Credit Hours of Course:

This course will focus on the OSI networking model, network topologies, IP
addressing, subnet masks, basic network design, beginning router configurations,
routing protocols, and introduction to LAN switching.
3 credit hours
(4 hours in class/lab and 6 hours outside class/on the internet per week)

II. Prerequisites:  Basic Computer Literacy: Windows, DOS etc.

III. Purposes of the Course:

Upon completion of this course, the students should be able to:

A. Describe the 7 layers of the OSI reference model.
B. Identify the reasons why industry uses a layered model.
C. Define and describe the function of IP and MAC addresses
D. Configure router elements.
E. Configure IP addresses.

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
written/lab assignments. (No credit for late work and no handwritten assignments).

D. Students will be expected to take all examinations on assigned dates.

V. Course Content:  

A. Networking Fundamentals  
   Lessons 1-15  
   Weeks: 1-3
B. Hardware required to operate a LAN  
   Lessons 16-30  
   Weeks: 4-6
C. Data transmission on a Network  
   Lessons 31-45  
   Weeks: 7-9
D. Managing the network  
   Lessons 45-65  
   Weeks: 10-12
E. Router configurations and LAN switching  
   Semester 2 Lessons 1-14  
   Weeks: 13-16

VI. Textbook: All the lessons are on the Web.  
Reference Material: Chellis, Perkins and Strebe.  

VII. Basis For Student Evaluation:  
Students will be evaluated based on the following basis.  

A. Written Exams (Midterm 25%, Final: 25%)  
   50%  
B. Lab Assignments  
   30%  
C. Presentations  
   20%  

Letter grades will be based on the following criteria:

90 -100 = A  
80 - 89 = B  
70 - 79 = C  
60 - 69 = D  
Below 60% = F  

(Items in syllabus subject to change at discretion of Instructor)

VIII. Lab Fees: There is a $10.00 lab fee for this course to cover the cost of lab consumables such as wires, connectors etc.

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