Syllabus

Time: Breeze Class

Course Description:

This course is designed to provide the analytical skills and knowledge to manage a complex network and infrastructure. It is not meant to be a course in network fundamentals. The course focuses are higher-level management issues that impact the delivery of data. Students should have a basic understanding of how networks function and the terminology. The delivery mode of the course is through the Breeze connection with the instructor located in South Charleston. Pre-requisite: IS 622, or TM 660, or permission.

Textbook: Networking in the Internet Age. Alan Dennis
Resources needed: MS Project and MS Visio (available on campus or by demo trial)

Course Objectives: Upon the completion of the course students will be able to:

1. Create and evaluate a network design
2. Evaluate competing vendor proposals
3. Identify the major issues in network management
4. Evaluate requirements for network hardware and software
5. Describe the planning process for network enhancements
6. Use MS Project and MS Visio tools
7. Write a proposal in response to an RFP

Course Format:

The format of this course will be weekly lecture through the videolink mode. The methods of instruction will use lecture, on-line discussion, case analysis, and web research. The class will use Vista as the course delivery tool and also for online work. Students are required to have an MU account in order to access the materials.

Disability Statement

Any student with a documented disability needing academic adjustments is requested to notify the instructor as early in the semester as possible, and must do so before the mid-term exam. Verification from MU disabled Student Support Services is required. All discussions will remain confidential.

Assignments:

Reading-- Reading will be from the textbook, select material (available for download from Vista), and web sites (URLS).

Slides--The PowerPoint slides are to be used for review and to cover additional material not found in the reading. The slide sets will be available in Vista.

Assignments—There will be independent assignments that involve network design. These will be worth 25 points each.

Cases—There are mini-cases at the end of each chapter and there are cases used in assignments. A case will be assigned for analysis and require a summary analysis by a selected student. Cases are discussed in class with each case worth 25 points. A student will be selected at each meeting to perform the analysis.

Project—A capstone project will be team-based and include a proposal as a response to a company's need for a network design plan. You will work with a team to complete the project and it is worth 100 points.

Discussion--The on-line discussion component allows us to extend our in-class discussion. The instructor will provide students with an introduction to using Vista. The course requirement is to post a response to each thread (discussion topic) at least 3 times per week. Discussions run from Monday to Sunday each week except when there are breaks. On-line discussions will be graded according to the following rubric: Each discussion is graded on number of posts and quality of the posts. No participation earns a zero and full participation earns 8 pts with partial contributions earning between 1 and 8 pts depending on the number of posts. The quality of your contributions will be graded on whether your discussions includes analysis of the question, extends the topic's discussion, includes references to the textbook reading for reinforcement of your viewpoint and includes outside sources. A series of quality posts that exceed the minimum number (3) for each discussion can earn up to 12 pts with fewer posts and lesser contributions earning between 1 and 12 pts. No posts will earn a zero. Simple responses are not discouraged but they do not count for the quality component of the grade. The rubric below will be used to assign quality points.

High
Your contributions to each Topic indicate your mastery of the materials assigned. Your responses might integrate multiple views and/or show value as a seed for reflection for other participants' responses to the thread. You provide evidence that you are reading the assigned materials and other student postings and are responding accordingly, bringing out interesting interpretations. You know the facts and are able to analyze them and handle conceptual ideas.
Medium
Your responses build on the ideas of another participant (or more) and dig deeper into assignment questions or issues. When you make intelligent posts during the week, including some good critique of the course material, then you have demonstrated you have an understanding of the material, are reading posts of your colleagues, and are contributing to the class. Your posts demonstrate confidence with the materials, but may be just a bit off target in one area or another.
Low
You have meaningful interaction with other participants' postings. Posts that state "I agree" or "I disagree" include an explanation of what is disagreed or agreed upon and why, or introduce

an argument that adds to the discussion. However, you may have rambling, lengthy posts that show no sign of having been re-read and refined before posting, and your writing suffers lack of clarity and comprehension.
Unsatisfactory
You will receive little credit in the week's discussion by just showing up and making trivial comments, without adding any new thought to the discussion. At the low end of the spectrum, no participation gets a "0." If you are not in the discussion, you do not earn any points.

The content of the online discussion will be used for quizzes so reading posts throughout the week will prepare you to do well on the quiz.

On-line-- Access Vista at www.vista.marshall.edu. Your computer must be able to display the Vista content and there is an exercise on the Vista web site that can be used to check for the proper settings to enable the student to use Vista. Disabling popups will interfere with the content! Assignments can be turned in via the class drop-box in Vista. The course gradebook (to track your progress) will be available in Vista. Students should check online for new assignments and announcements daily. Lecture slides may also be downloaded from Vista. All materials will be available in Vista. All assignments have a midnight due date and late submissions will be penalized at the discretion of the instructor. Assignments are due into the dropbox by 12 am on the due date. For problems with Vista, please call the MU help desk for assistance. Discussions are graded weekly and you will receive feedback on your contributions. Each discussion is worth 14 pts.

Quizzes—there will be quizzes every week in class that will cover content from the reading, lecture, and online discussion. Each quiz is taken in class and will be worth 15 pts.

Grading

Please note that the grading scale is **not** traditional. Excellent work must be superior in quality and content and the student must be an active classroom, on-line and team participant to earn an "A" grade. The grade of "B" indicates acceptable work with deficiencies in content, quality, or class/on-line participation. Less than a "B" grade is not an acceptable graduate level rating and may place the student on academic probation. A grade lower than "B" in a graduate level class indicates severe deficiencies in content, quality or class participation. An incomplete will not be given unless a documented emergency exists at the end of the semester that prevents the completion of the class. An Incomplete will be given only when all assignments have been turned in and received a passing grade up to the point of the request for the incomplete. The work not completed must have an agreed-upon due date for completion.

Grade	Per Cent Earned
A	90 - 100
B	82 – 89
C	75 - 81

D	**65 – 74**
E	**< 64**

Activities	**Points**
Discussion	300
Cases	300
Assignments	100
Project	100
Quizzes	225
Total	**1025**

The standard for written and oral presentations will reflect acceptable business practices. Sloppy or incomplete work will be penalized. No late projects are accepted.

Course Policies

Teams

Each team is responsible for learning the material and performing the required work. The work should be divided between the students and reflect a joint effort. If a team member stops contributing, it is obligatory to inform the instructor.

Plagiarism Policy

All work submitted under your name is assumed to be done by you. If it is discovered that the work submitted by you or your group was written by another or if material is copied without proper attribution, the instructor will record an E grade for the course. Cutting and pasting from web sites is considered plagiarism unless attribution is given. Entire pages of content cannot be attributed to someone else and you still receive credit for doing original work. Be aware that cutting and pasting is detectable forensically.

Schedule of Events

Date/Week	**Reading**	**Topics**	**Meeting**
1 8/22	Chapter 1	• Historical perspective of data communications • Network types • Layers • Standards • Layered architectures	Quiz Case assigned

		• IM • Videoconference • Using Vista for the class • How to do a case analysis	
2 8/29	Chapter 2	• Client-server architectures • Web issues • Email issues • IM • MS Project • MS Visio	Quiz In-class assignment
3 9/5	Chapter 3	• Internetworking • Network protocols • Application layer issues • Addressing • Routing • TCP/IP	Quiz
4 9/12	Chapter 4	• Hardware layers • Ethernet • Physical circuits • LAN design issues	Quiz
5 9/19	Chapter 5	• Backbone architectures • VLANs • FDDI • ATM • High speed architectures	Quiz In-class assignment
6 9/26	Chapter 6	• Circuit switched • Dedicated services • Packet switched • VPNs • Best practices	Quiz
7 10/3	Chapter 7	• Internet • High speed alternatives • Wireless	Quiz
8	Chapter 8	• WLANs	Quiz

10/10		• Best practices	
9 10/17	Chapter 9	• Designing and implementing networks • Logical vs physical network design • Network design principles	Quiz In-class assignment
10 10/24	Chapter 10	• Network security • Risk assessment • Unauthorized access	Quiz
11 10/31	Additional readings	• Issues in network security • DR • Business continuity	Quiz
12 11/7	Chapter 11	• Day to day management • Network costs	Quiz
13 11/14	Additional Readings	• Personnel issues	Quiz Online meeting
14 11/21	No Class	No class	
15 11/28	Additional Readings	End user support	
16 12/4		Presentation of Capstone Project	