ISMN 3040 - Telecommunications Management
Spring 2014, BB 155, TTH 3.30-4.45 p.m.

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The objective of this course is to introduce you to the importance of telecommunications to business. From Google to smart phones to web shopping to getting news about latest security threats, citizens are dependent on telecommunications technologies to deliver value added to their lives. You as a MIS professional have a major role in the future to understand and work with telecommunications vendors, engineers, and designers so that new services could be created and current ones maintained.

In order to prepare you for your MIS career, this course provides you technical details of telecommunications and expects you to master the details of this technology. By the end of the course, you would have learned the technology behind data communications, basics of telecommunications networks, and examples of how they are used in industry. You will also work on a project that illustrates the technology issues faced by managers.

Text Books:
Business Data Communications, Stallings and Case, 2013

Requirement:
A notebook/ smart phone/ iPad or other device that you can bring to the class through which you can perform research; respond to questions in class.

Grading Policy:
Tests (3 of them):	**450 points**
Attendance:	**50 points**
E-Journal:	**50 points**
Individual assignments (9):	**270 points**
Team Project (2):	**180 points**

The grade will be based on a total of 1,000 points:
900 - 1000	A	800 - 890	B
700 - 790	C	600 - 690	D
Below 590	F		

No make up exams will be given until valid excuses as per University policy are submitted. Any make up exam will be held on dead day. All students will abide by the Academic Honesty standards outlined in the *Tiger Cub*. Any violations of the standards will be handled along the guidelines outlined the *Tiger Cub*. **Attendance will be taken in every class and project site. You are responsible for reading and understanding the pages in the assigned chapters and class notes.**

Learning Objectives:
Telecommunications are a vital part of our lives, from the telephone in the past to mobile data access and the Internet today. Every businessperson must have a thorough knowledge of

basic telecommunications principles and technologies in order to make informed choices. The choices that you will make may determine the profitability of your company and its success in the marketplace.

Telecommunications is not an easy subject to master at first. It will require a rigorous commitment to digest a large amount of knowledge in a short amount of time, but you will be able to accomplish this during this course. This class will be challenging and requires much reading and work outside of class. In particular you will need to work outside of class time in order to finish the projects.

Below is a basic outline for the knowledge you should gain from this course. The message from the course is: Technologies must always be aligned with business needs and as technology changes rapidly, business opportunities and threats expand exponentially.

I. Business Basics Using Classes & Assignments
a.   You would be able to discuss the companies that are in the telecommunications business.
b.   You would be able to appreciate how telecommunications is changing the means by which business operates now and in the future.

II. Technology Basics Using Classes & Assignments
a.   You would be able to explain how data is transmitted across the network (protocols).
b.   You would be able to differentiate between different telecommunications media.
c.   You would be able to explain the different types of networks
d.   You would be able to discuss broadband technologies and how they are integrated in mobile technologies.

III. Integration of Technology and Business Using Experiential Learning Projects
a.   You would analyze how organizations decide on utilization of different technologies.
b.   You would recommend how an organization can use appropriate technology to achieve its objectives.

TENTATIVE CLASS SCHEDULE

Wk Chapter   Chapter Title

I. 1/8-1/14:   Chapter 1: Introduction
Introduction to course outline, introduction of members in class
1/14 (OPCD): Communication Skills: PPT Deck, Writing a paper, Team Working

C&S 1   Introduction,
What is Technology? What is Telecommunications?
Unified Communications

Individual assignment #1: **upload due 1/19 (maximum two page paper)**
Research and find information about a telecommunications company that is doing business in and/or outside the U.S. Look at the historical stock values of a company you choose and briefly describe why the company has performed poorly or well. What are the technologies currently produced by this company and what are the future products? (50 points)

Objective: Learn about the different telecommunications companies and their products/ services.

II. 1/15-1/21: Chapter 2: Business Information

Individual Assignment #2: Upload due 1/26 (as a paper) Answer one problem (p. 63): Q. 2.8, 2.9, or 2.11

III. 1/23-1/30: Chapter 3: Distributed Data Processing

Individual Assignment #3 (pp. 98-99): Answer one problem and upload a ppt slide deck (p. 98-99): Q. 3.2, 3,5, 3.6, 3.9, or 3.11; Due 2/2

1/30: Review for Test #1
2/4:   Test #1: 150 points

IV.   2/6-2/20: Technology Basics: Telecommunications Media
       Guided media: (Ch. 12 – pp. 349-358
       Wireless WANs (Ch. 17 – pp. 480-509)

Team Project #1: Map storm drains using GPS for the City of Opelika (2/6, 2/7, 2/13, and 2/14)

Individual Assignment #4: Problem (ppt deck) (p. 367). 12.7 or 12.8: Due 2/23

Individual Assignment #5 (pp.508-509) (Paper): Problems. 17.1, 17.5, or 17.7: Due 3/2

V.   2/25-3/4: Chapter 4: Data Transmission

3/4: Review for Test #2
       E-Journal #1 due 3/9: 30 points
       3/6: Test #2: 150 points

VI.   3/18-3/25 : Chapter 5 : Data Communication Fundamentals

Team Project #2: 3/20, 3/21, 3/27, 3/28 : Bring up the maps of the storm drains using ArcGIS or Google Maps for the City of Opelika; Upload a report on your project as a team.

Individual assignment #6 (pp. 151-152) (Paper): Problem 5.7, 5.8, or 5.12 : Due 3/30

VII.   3/27-4/3 : Ch. 7 : The Internet
Individual Assignment #7 (pp.204-205) (PPT Slides) : Problem 7.1, 7.2, 7.8, or 7.11 : Due 4/6

VIII.   4/8-4/10 : Ch. 8 : TCP/IP
Individual assignment #8 (pp.233-234) (Paper): Problem 8.4, 8.5, or 8.9 ; Due 4/13

IX.   4/15-4/22 : Ch. 18 & 19: Computer and Network Security Threats and Techniques
Individual assignment #9 (p. 541-542 ; 567) (Paper) : Problem 18.1, 18.4, or 19.6 ; Due 4/20

4/22: Review for Test #3

E-Journal #2 due 4/27: 30 points

Test #3: 4/24 (150 points)

Electronic Journal:

Please respond only with respect to the material you have learnt so far. Please respond to all of the following prompts and upload the responses to the WebCT.

What questions or comments came to your mind as you progressed through the material?

What surprised, interested, or impressed you about your progress on the material?

What did you learn while you were working on your material, and how did you feel about it?

What did you find most difficult to tackle while you were working on the material?

If you were to give advice or directions to someone new to this material, what helpful hints would you offer?

What aspects of the material have you enjoyed thus far and why did you enjoy it so much?

What information did you learn from the material that you could predict you would use in your future career?

For your final entry per segment of class material, please respond to the following: As a result of the material you just completed, what have you learned about yourself as a MIS student and as a future MIS professional?