ISTM610 – Business Data Communications
Course Syllabus – Summer II 2019

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Office hours: after class and as needed by appointment

Course Description:
The objective of this course is to provide a basic understanding of the technical and management aspects of computer networking and security. This course builds on the knowledge and skills you have acquired in prior IS courses; I presume that you have a general understanding of information technology and its applications. This syllabus provides a general plan for the course, but some deviations may be necessary.

Book and resources:
Required: none
Recommended: Fitzgerald & Dennis, Business Data Communications and Networking, 11th - 13th editions are OK
www.wiley.com/college/fitzgerald

Grading Policy:
1. The following grading scale will be applied to produce the final grade.
   90 - 100   A
   80 - 89.99 B
   70 - 79.99 C
   60 - 69.99 D
   Below 60  F
2. Make-up exams are not encouraged. If you know that you will not be present for an exam, please notify me as soon as possible. In the event that an exam is missed for an excused absence, you will have two options.
   a. An all essay make-up exam will be given.
   b. The next exam grade will be substituted after subtracting a 10% penalty. (For example, assume you miss Exam 1. If you make a 90 on Exam 2, your Exam 1 grade will be an 80.)
3. Final exams will NOT be given early.
4. Late work is defined as work presented after the assignment has been requested at the beginning of the class period on the assignment due date. Late work will not be accepted.
5. Assignments are expected to be printed on a printer, not handwritten (except when applicable). When handwritten assignments are turned in, they will not be accepted if the pages are ripped from a notebook.

Grading Evaluation % of final grade
Exams 1-4 16 each
Research Project 12
OS installs 9
RFP 5
Participation 5
Video 5

Assignments:
Additional information about the exams, assignments, labs, and projects will be provided in class. The scheduled due dates for assignments, labs and project activities are subject to change, but all changes will be discussed in class. Assignments are due on or
before the start of class on the due date. Late assignments will NOT be accepted.

Quizzes:
Quizzes will be given periodically. Notice will be given prior to the first one or two. Questions typically cover material covered within the last one or two class periods.

Participation:
Class participation includes (among other things) punctual attendance, providing discussion in class, not being disruptive, etc.

Attendance:
Students are expected to attend all class regularly and punctually. For late arrivals and absences, it is the student’s responsibility to obtain information from missed classes from other students (this includes changes to due dates and contents of exams, assignments, labs, and projects). A late arrival to the class is counted as an absence.

For one-session summer classes:
Students with absences will begin losing “participation points.”
Students having more than 3 absences will drop one letter grade.
Students having more than 6 absences will drop two letter grades.

Absence Notification:
The Department of Student Life (in the Student Services at White Creek complex on west campus) provides instructors with prompt notification of student absences reported to them by parents and students. This office’s telephone number is 845-3111, and their email address is studentlife@tamu.edu. Immediately after being notified, the Department of Student Life prepares a memorandum that is sent to ALL of your instructors. This notification provides: (1) the date of notification, (2) the nature of notification (telephone call, official correspondence, etc.), (3) general information regarding the reason for missing class (death in immediate family, medical reasons, etc.), and (4) the dates that you are expected to miss class. You are strongly encouraged to take advantage of this service which precludes you from individually notifying each of your instructors when you will be absent from class. For more information on this service, visit their website.

Cheating:
Cheating will not be tolerated. If the instructor believes a student is guilty of cheating or plagiarism within the instructor's class, any of the following actions may be taken:
1. award no credit for the paper or test
2. withdraw the student from the course
3. award the student a failing grade for the course
Cheating is defined as “the possession, receipt, use, solicitation or furnishing of unauthorized aid in an academic endeavor.”
"Unauthorized aid” for the purposes of this class includes:
- copying of another student’s test or any homework assignment
- completing an assignment with another student
The matter may also be brought to the attention of the Department Chair and Dean of the School of Business. If you wish to report academic misconduct or if you want to know more about the Aggie Honor system, visit http://aggiehonor.tamu.edu.

The Aggie Honor Code
“An Aggie does not lie, cheat, or steal or tolerate those who do.”
Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System.
For additional information please visit: http://aggiehonor.tamu.edu.

Disabilities
The Office of Support Services for Students with Disabilities coordinates Texas A&M University's programs and efforts for the benefit of disabled students. Students who have documented disabilities or believe they have a disability should be referred to Support Services for Students with Disabilities. This office has the responsibility for verifying the existence of a disability and for
suggesting what accommodations or modifications are appropriate. When there is a need for accommodation of a student's academic program, Support Services for Students with Disabilities will contact the student's classroom instructors regarding this need and direct the student to work directly with the classroom instructors to work out specific arrangements. You should notify your instructor within the first week of the semester if this applies to you. Contact info: http://disability.tamu.edu, call 845-1637 or go to the Disability Services building at the Student Services at White Creek complex on west campus.

Copyright of documents
All documents, including handouts, used in this course are to be considered copyrighted. By “handouts,” I mean all materials generated for the class, which include but are not limited to the syllabus, quizzes, exams, lab problems, in-class materials, review sheets, presentations, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

Misc:
Please bring a pencil and Scantron form 882-E (the small green and white one) to each exam.

**Turn off all cell phones and beepers prior to entering the classroom. No laptops, etc. allowed**
## Tentative Schedule of Classes - Summer II 2019

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Tuesday</td>
<td>Chapter 1 – Intro to Data Communications</td>
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<tr>
<td>Wednesday</td>
<td>No class</td>
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<tr>
<td>Thursday</td>
<td>Chapter 2 – Application Layer</td>
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<tr>
<td>Friday</td>
<td>Chapter 3 – Physical Layer</td>
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<tr>
<td>Monday</td>
<td>Chapter 3 – Physical Layer</td>
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<tr>
<td>Tuesday</td>
<td>Paper topic</td>
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<tr>
<td>Wednesday</td>
<td>Exam 1 (material covered thus far)</td>
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<tr>
<td>Thursday</td>
<td>Chapter 4 – Data Link Layer</td>
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<tr>
<td>Friday</td>
<td>Chapter 4 – Transport and Network Layers</td>
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<tr>
<td>Monday</td>
<td>Chapter 5 – Transport and Network Layers</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Paper outline</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Exam 2 (material covered since last exam)</td>
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<tr>
<td>Thursday</td>
<td>Chapter 6 – Network Design</td>
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<td>Friday</td>
<td>Chapter 7 – Wired and Wireless LANs</td>
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<tr>
<td>Monday</td>
<td>Paper due – ecampus - midnight</td>
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<tr>
<td>Tuesday</td>
<td>Exam 3 (material covered since last exam)</td>
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<td>Wednesday</td>
<td>Chapter 8 - Backbone Networks</td>
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<td>Thursday</td>
<td>Chapter 9 – Wide Area Networks</td>
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<td>Friday</td>
<td>Chapter 10 – The Internet</td>
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<td>Monday</td>
<td>Lab day</td>
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<td>Tuesday</td>
<td>Lab day</td>
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<td>Friday</td>
<td>Lab day</td>
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<tr>
<td>Monday</td>
<td>Chapter 12 – Network Mgmt</td>
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<tr>
<td>Tuesday</td>
<td>Exam 4</td>
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<td>Wednesday</td>
<td>Paper due – hard copy in class</td>
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<tr>
<td>Thursday</td>
<td>Paper due – ecampus - midnight</td>
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<tr>
<td>Friday</td>
<td>Paper due – in class and ecampus by 8am</td>
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<tr>
<td>Monday</td>
<td>Chapter 11 – Network Security</td>
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<tr>
<td>Tuesday</td>
<td>Video due</td>
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*Note: Fridays are lab days.*
RFP Project

Develop an RFP for your (fake) company’s network. Included below are the main components of the RFP. In addition, also create a one-page business case describing to management how this network you are proposing to add will make “business sense.” Please submit one hard copy and an electronic copy via turnitin.com

*** Do not use any CMIS Case Competition (CCC) RFP or other CCC info in any way! ***

Components of an RFP

- **Background Information**
  - Organizational profile; Overview of current network; Overview of new network; Goals of the new network
- **Network Requirements**
  - Choice sets of possible network designs (hardware, software, circuits); Mandatory, desirable, and wish list items, Security and control requirements; Response time requirements; Guidelines for proposing new network designs
- **Service Requirements**
  - Implementation time plan; Training courses and materials; Support services (e.g., spare parts on site); Reliability and performance guarantees
- **Bidding Process**
  - Time schedule for the bidding process; Ground rules; Bid evaluation criteria; Availability of additional information
- **Information Required from Vendor**
  - Vendor corporate profile; Experience with similar networks; Hardware and software benchmarks; Reference list

Lab Work

My teaching assistant will have lab hours to help with your questions associated with the install of Windows Server 2008 and Linux. You are required to load the operating systems yourself. Do not wait until the night before the due dates to load the operating systems and/or configure them. Many students will run into problems working with the operating systems so you need to allow yourself time to get help.

*Tentative* lab exercises:

#1 Install Windows Server 2008 and Red Hat Linux within the Microsoft Virtual PC environment

#2 Chapter 4 (DNS) – Windows only

#3 Chapter 5 (Users) -

#4 Chapter 6 (Web Server) –

#5 Email configuration – Set up Exchange Server on Windows Server and Outlook Express in XP
Research paper info

Submit the completed paper 1.) via email to me, 2.) in hard copy, and 3.) electronically to Turnitin.com

Create your own original work!!! Refer to the course syllabus to see the actions I will take if you do plagiarize. Please be aware that Turnitin.com does a very good job of checking Internet resources, journals, “research paper databases”, etc. Previously, I used it on research papers and had 40% and nearly 20% of students that had high plagiarism scores. Those students that were allowed to remain in my course after that suffered a loss of one to two letter grades on their semester grade.

Please refer to the library.tamu.edu website for more information on plagiarism and academic dishonesty. In addition to the guidelines included there, do not “cut and paste” from another source into your paper. The goal of research papers is to research a particular topic and then write about the topic in your own words.

Here are the guidelines for the paper:

- 20 15 pages
- double line spacing
- 12-point Arial font
- all four margins at 1"
- include figures, tables, etc in an appendix
- the cover page, references, tables, figures, appendix, etc do not count toward the page total

You must have at least 15 references, with a minimum of 5 being from journals or books. Wikipedia is not a valid source. You also must use at least one Gartner Group reference.

Use a citation format similar to the example paper.

A list of potential topics is found on the course website. A copy of the grading rubric is available on the course website.

Since this is an INFO class, the paper should (to some extent) touch on the business impacts. For example, if your topic is “wireless communication,” don’t just provide a history and future uses of the technology. Rather, you should include a discussion about how this impacts business (bottom line, efficiencies, effectiveness, etc).