

COURSE TITLE BLACKBOARD SITE	INT 4013 – Telecommunications & Networks Fall 2011 – http://my.ltu.edu and select CRN 1798
INSTRUCTOR	David Bingham AT&T Signature Client Group Primary e-mail – Bingham.dg@gmail.com Secondary in case of emergency e-mail address dgbingham@att.com
SCHEDULE	September 7 – December 17, 2011 Refer to http://www.ltu.edu/registrars_office/calendar_final_exam.index.asp for the last date to withdraw and other important registration related information.
LEVEL/HOURS PREREQUISITE	Graduate or Undergraduate Degree / 3 credit hours
REQUIRED TEXT (See Blackboard for additional resources)	Required Text(s): The Essential Guide to Telecommunications, 4th Edition By: Annabel Dodd (ISBN 0-13-148725-6) Optional Text(s): Newton Telecommunications Dictionary Available for online purchase through LTU Bookstore at: Available for online purchase through LTU Bookstore at: http://lawrence-tech1.bkstore.com/bkstore/TextbookSelection.do?st=489
ADDITIONAL RESOURCES	LTU Online student resources: http://www.ltu.edu/ltuonline/
TECHNICAL SUPPORT	Technical support for using Blackboard is provided by the Helpdesk, 248.204.2330 or helpdesk@ltu.edu . Send the Help Desk a form detailing any issues by clicking here http://tinyurl.com/3yqrvne .

COURSE SCHEDULE FOR COLLEGE OF MANAGEMENT (GRAD) SEMESTER COURSES

This fully online course begins with a partial week online course orientation period to familiarize yourself with the online learning environment and to meet online or via the phone with your instructor. Each subsequent week starts on a Monday and ends on a Sunday.

Dates	Modules	Topics / Readings	Assignments Due
Prior to Semester Start and Sep 7 – Sep 11	Module 0	Overview of textbook Online Learning Orientation Course Orientation and group formation	Course orientation Instructor conversation Individual pre-assessment Propose teams Propose nnn
Week of Sep 12 – Sep 18	Module 1 (note: more than one module may be scheduled in a week)	Analog Vs Digital. Read Chapter 1 in Annabel Z. Dodd - Transition to digital - Measuring speed and capacity - Compression and Multiplexing - Types of LAN, MAN, WAN	Quiz 1 - 5 pts Discussion D1 – 10 pts
Week of Sep 19 – Sep 25	Module 2	Telephone Systems Read Chapter 2 Dodd - VoIP PBX - PBX's - Centrex systems - VoIP Centrex	Quiz 2 5 pts Discussion D2 - 10 pts
Week of Sep 26 – Oct 2	Module 3	History of Bell Read Chapter 3 On-line reading chapter 10 on Globalization	Quiz Q3 - 5 pts Discussion D3 – 10 pts
Week of Oct 3– Oct 9	Module 4	International Paper Assignment Due	International paper Discussion D4 – 10 pts
Week of Oct 10 – Oct 16	Module 5	VoIP and the PSTN Read Chapter 4 Annabel Dodd - Voice over broadband - Switched services - Public Switched Telephone Network	Quiz Q5 – 5pts Discussion D5 – 10 pts
Week of Oct 17 – Oct 23	Module 6	Read Chapter 5 Dodd - Virtual Private Networks - Frame Relay - Private line - T1	Quiz Q6 – 5 pts Discussion D6 – 10 pts

Dates	Modules	Topics / Readings	Assignments Due
		<ul style="list-style-type: none"> - ISDN - DSL - Gig E - ATM - SONET 	
Week of Oct 24 – Oct 30	Module 7	On-line reading - Multi Protocol Label switching (MPLS)	Quiz 7 – 5 pts (quiz from on-line research) Discussion D7 Deep dive assignment due 50 points
Week of Oct 31 – Nov 6	Module 8	Listen to Podcast - TBD Convergence in public networks	Quiz 8 – 5 pts Discussion D8 – 10 pts
Week of Nov 7 – Nov 13	Module 9	Read chapter 8 Dodd - Mobile Services - Cellular networks - Spectrum and rights to airwaves - Mobile Carriers - 1 G to 3G	Quiz Q9 – 5 pts Discussion D9 – Wireless Matrix assignment = 50 pts
Week of Nov 14 – Nov 20	Module 10	Major Topic Paper due	Major topic paper due Bb
Week of Nov 21 – Nov 27		Light Week – Thanksgiving Break	No assignments this week. Enjoy your time off.
Week of Nov 28 – Dec 4	Module 11	Call Centers - On-line reading assignment	Discussion D11 Call center assignment = 50 pts
Week of Dec 5 – Dec 11	Module 12	Read Chapter 9 Dodd - WiFi - Broadband wireless -Personal area Networks -Sensor networks	Q12 – 5 pts Discussion D12
Week of Dec 12 – Dec 17	Module 13	Course review assignment	Course review assignment= 10 pts.

STUDENT EVALUATION

Letter grades are awarded based on the total number of points achieved. Points are deducted for late assignments.

EXAMPLES:

Assignments	Points
Quizzes	50 (5 pts each)
Discussion Board	10 pts each
International paper	100
MPLS Deep Dive	50
Call Center Technology	50
Wireless Matrix	50

Class Points	Letter Grade
96 and above	A
90 – 95	A-
87 – 89	B+
83 – 86	B
80 – 82	B-
77 – 79	C+
73 – 76	C
70 – 72	C-
61 – 70	D (Undergrad Only)
60 and below	E

Note: Grades lower than a “B” fall below the LTU graduate standard

EDUCATIONAL GOALS

The goal of the course is to familiarize you with the technologies and companies in the telecommunications industry both domestically and globally.

STUDENT LEARNING OBJECTIVES / OUTCOMES

Students taking introduction to telecommunications and networking will be given a basic understanding of the telecommunications industry from it’s history and current environment. Telecommunications technologies will be researched from the basics of analog to digital conversion to understanding the telecommunications business environment. For Networking a basic understanding of the elements of data networking and how they relate to telecommunications.

INSTRUCTIONAL METHODS AND COURSE ORGANIZATION

The course is broken up into modules that are to be completed each week. The modules will have two main folders called Theory and Practice. Exercises and reading assignments are within Theory and assignments such as the weekly quiz and discussion boards are within the Practice folder. Each week you will have a quiz which is 100% from the required text. Each week there will be a discussion topic or assignment. To receive full credit for each weeks discussion you need to do the assignment or answer the questions and respond to two other students work. If you respond to only one or don’t respond you will lose points for that weeks module. Each week students need to respond by Wednesday or Thursday that given week to give other students time to post two responses.

This course also has two writing assignments. Each writing assignment must follow APA method of citation, include an introduction and conclusion and be organized in a clear and concise manner. All citations need to be from a peer reviewed source so Wikipedia is not acceptable.

Blackboard Learning Environment – Blackboard at my.ltu.edu contains the syllabus, all assignments, reading materials, streaming videos, narrated PowerPoint mini-lectures, podcasts, written lecture notes, chapter quizzes, links to Web resources, and discussion forums. You will submit all assignments via Blackboard, and are expected to participate regularly in discussion topics. Please take time to familiarize yourself with the organization of the Blackboard site. You will want to check the site frequently for announcements reminding you of new resources and upcoming assignments.

Student/Instructor Conversations – Students keep in touch with the instructor via e-mail messages, telephone conference calls, and IM conversations.

Self-Assessments – Pre- and post- self-assessment tools will help students measure their entering skills and progress during the course.

Required Reading – Textbook chapters should be read according to the schedule outlined in the syllabus. Chapters will be discussed online.

CLASS POLICIES AND EXPECTATIONS

I plan to offer you a valuable learning experience, and expect us to work together to achieve this goal. Here are some general expectations regarding this course:

Each student has a LTU email account. If you wish to use a different email address for this course, please **change your email address in Blackboard under “Blackboard Tools”, then “Personal Information”** and send an email to me to store your email address in my directory.

Readings, discussion forum participation, and written assignments must be completed according to the class schedule. It is important to contact the instructor as needed to discuss personal needs regarding course requirements and assignments.

It is essential that all students actively contribute to the course objectives through their experiences and working knowledge.

All assignments must be submitted on schedule, via Blackboard, and using Microsoft Office compatible software. If you need to submit an assignment via email, contact the instructor in advance.

Assignments must be completed to an adequate standard to obtain a passing grade. Requirements for each assignment are detailed in this syllabus.

Be prepared to log into Blackboard at least once each day. Please focus your online correspondence within the appropriate Blackboard discussion forums so that your colleagues can learn from you.

At midterm and at the end of the course, you will be invited to participate in a University evaluation of this course. Your feedback is important to the University, to LTU Online, and to me as an instructor, and I encourage you to participate in the evaluation process.

It is important for you as students to know what to expect from me as your instructor:

- I will be available to you via e-mail and phone, and will promptly reply to your messages.
- I will maintain the Blackboard web site with current materials, and will resolve any content-related problems promptly as they are reported to me.
- I will send out a weekly e-mail update to all class members to guide upcoming work and remind you of assignment due dates.
- I will return all assignments to you promptly, and will include individualized comments and suggestions with each assignment.
- I will hold our personal written or verbal communications in confidence. I will not post any of your assignments for viewing by the class without requesting your approval in advance.

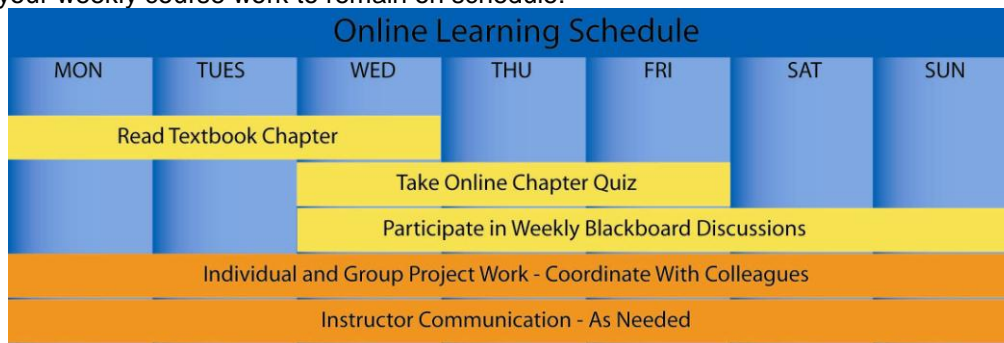
- I will treat all members of the class fairly, and will do my best to accommodate individual learning styles and special needs.
- If any of these points need clarification, or should special circumstances arise that require my assistance, please contact me so that we may discuss and resolve the matter.

PRACTICAL GUIDELINES FOR CLASS LOAD EXPECTATIONS

A three-credit course generally requires at least nine hours per week of time commitment. Here are some practical guidelines to help schedule your time commitments for this online course:

- A 14-week semester (the Summer semester is compressed into 10 weeks) would require at least 126 hours of time commitment to successfully complete all readings, activities, assignments, and texts as described in this syllabus.
- You should reserve at least 6 hours per week to read the required textbook chapters and resources, participate in online discussions, review presentation materials, and work through online quizzes. This effort will total at least 84 hours over the course of the semester.
- You should organize your remaining time to roughly correspond with the point value of each major assignment. This means that you should plan to spend at least:
 - 8-9 hours preparing your case study review;
 - 24-40 hours working with your group on the three parts of your semester-long project;
 - 8-9 hours working on the various components of your reflective consolidation (final exam).

These guidelines may not reflect the actual amount of outside time that you – as a unique individual with your own learning style – will need to complete the course requirements. The number of hours each week will vary based on assignment due dates, so please plan ahead to insure that you schedule your academic, work, and personal time effectively. The following graphic may be used to guide you in planning your weekly course work to remain on schedule:



ASSIGNMENT DETAILS

Course assignments and evaluation criteria are detailed below. Please review these requirements carefully. See the section Academic Resources / Assessment Guidelines for information about assessment of written and oral presentations.

Details for all assignments are shown below. Please note that you should not submit any assignments to the Blackboard “Digital Drop Box.” All assignments are submitted using the Blackboard “Assignments” or “SafeAssign” function. Some assignments are also posted to the Blackboard Discussion Forum for student comments.

Assignment International Topic Paper (100 Points)

Overview – With this assignment I want each student to choose a different country to research their current telecommunications environment from a regulatory perspective. Prior to writing the paper you must send me an e-mail telling me which country you have chosen.

Proposal:

- Through your research into the regulatory environment for your chosen country you need to be able to articulate and answers to as many of the questions listed below.
 - Regulatory Environment – What is the current status of the privatization for you selected country?
 - Highly regulated by the Government or has it be de-regulated.
 - If it has been de-regulated, when was it deregulated and what happened to the incumbent carrier?
 - Have there been any benefits since de-regulation?
 - Did they follow the steps of deregulation described in class?
 - If it has not been de-regulated, are there plans to de-regulate it and when?
 - What issues are holding it from taking place?
 - Is it a Monopolistic or Competitive Environment?
 - What Level of Competition Exists?
 - Is there a dominant carrier?
 - Who are the Competitors?
 - What Services are offered?
 - Plain old telephone service?
 - Internet?
 - Advanced Data Services such as Frame Relay and ATM (Asynchronous Transfer Mode) for businesses?
Other?
 - Have there been any benefits since de-regulation?
 - Any significant Telecom issues that you ran into while researching?

Deliverables:

Paper value is 100 points.

- **5** page minimum for written work (this does not include the cover page, contents, or references). Please avoid large lists that take up large portions of the paper.
- The paper will be checked for plagiarism so make sure you use all of your own writing in the paper. If more than 15% of your paper is cited as being copied without proper citation the paper will not be accepted and you will receive a zero. In Blackboard there is a link to submit your paper ahead of time as a draft to make sure you meet this requirement.
- Must site all references within text and on the reference page. This is a research paper so 1 to 3 references does not constitute research

- Paper must include a cover page, table of contents, and reference page with references done in APA style. I have provided a simple overview of APA in the course resources for your assistance.
- All pages must be numbered.
- All papers are to be submitted into blackboard through the “Practice folder link”. You may also submit a draft of your paper in the draft Safe Assignment link.

Assignment Major Topic Paper (100 Points)

Overview – The Major Topic Paper assignment is designed to give you an opportunity to gain a deeper understanding of a particular technology of interest. It will enable you to understand how to research a technology and be able to explain it to others in terms they can understand. This is a research paper so it will require you to find several sources of information on the particular topic from books, articles, whitepapers, and websites. You may NOT use Wikipedia as a source.

Proposal

To choose a topic you **MUST** present your topic proposal to me prior to starting your research. The topic can be from any of the technologies discussed in class or it can be one you have heard of outside of class but must be related to the Telecommunications industry. All topics must be approved by me prior to writing the paper.

This is a technical paper with a business application description. This paper can be broken into two parts. The first part is a technical description of the technology and the second part is a description of the business applications driving the use of the technology.

Deliverables:

The total points possible for this paper 100 points.

- 5 page minimum for written work (this does not include the cover page, contents, or references). Please avoid large lists that take up large portions of the paper.
- The paper will be checked for plagiarism so make sure you use all of your own writing in the paper. If more than 15% of your paper is cited as being copied without proper citation the paper will not be accepted and you will receive a zero. In Blackboard there is a link to submit your paper ahead of time as a draft to make sure you meet this requirement.
- Must site all references within text and on the reference page. This is a research paper so 1 to 3 references does not constitute research
- Paper must include a cover page, table of contents, and reference page with references done in APA style. I have provided a simple overview of APA in the course resources for your assistance.
- All pages must be numbered.
- All papers are to be submitted into blackboard through the “Practice folder link”. You may also submit a draft of your paper in the draft Safe Assignment link.

Quizzes and Online Participation (points)

Quizzes:

Each week there will be a quiz on the reading material worth 5 points. They must be completed by Sunday at midnight at the end of the module week.

Discussion:

Participation in discussions is mandatory. Each student will receive a maximum of 10 points for each weeks participation. Discussion posts should include your own thoughts not copied material from sources unless it is part of your own written post and is cited using APA. Each week students need to post their discussion on Wednesday and then respond to two other students responses by the end of the week. It is important that you post as early as possible to allow others to respond. Points will be deducted from the post if you do not respond to two other students work.

SYLLABUS ADDENDA

Please see the LTU Online “Current Students” web site <http://www.ltu.edu/ltuonline/> for comprehensive information about Lawrence Tech’s academic services, library services, student services, and academic integrity standards. The content of this web site is explicitly included in these syllabus requirements.

The LTU Online “Current Students” web site also includes grading rubrics used by your instructor to evaluate written assignments, discussion forum participation, and group assignments. Please note that the SafeAssign anti-plagiarism product will be used for written assignments submitted for this course. Please see the instructions included on the [eHelp web site](#) regarding the use of the SafeAssign product.

Undergraduates: Leadership Transcripts

The leadership transcript enables students to track co-curricular activities that are undertaken above and beyond the requirements of the LTU curriculum. The leadership transcript serves students by enhancing the leadership portfolio; providing the opportunity for a transcript of distinction; enhancing their resumes; and assisting in articulating leadership experience. It can be accessed by logging on to Banner Web and clicking the Student and Financial Aid tab. Leadership Activities is located at the bottom of the list.