

COURSE TITLE BLACKBOARD SITE	INT4023- Exploring IT Security Spring 2011 – <a href="http://my.ltu.edu">http://my.ltu.edu</a> and select CRN 3883
INSTRUCTOR	David K. Clark Technical Sales Executive / AT&T Contact Information dc7936@att.com, 248-905-8823 Office, 248-345-0839 Cell (Best Method) 6:00 PM – 8:00 PM Monday through Friday
SCHEDULE	Module 0 begins January 7, 2011 with the final exam week of April 18, 2011 (College of Management schedule)  See <a href="http://www.ltu.edu/registrars_office/calendar_final_exam.index.asp">http://www.ltu.edu/registrars_office/calendar_final_exam.index.asp</a> for LTU academic calendar information.
LEVEL/ HOURS PREREQUISITE	BSIT Degree / 03 credit hours Admission / prerequisite requirements
REQUIRED TEXT  (See Blackboard for additional resources)	Roberta Bragg, Mark Rhodes-Ousley, & Keith Strassberg The Complete Reference: Network Security ISBN: 0-07-222697-8  Available for online purchase through LTU Bookstore at: <a href="http://lawrence-tech1.bkstore.com/bkstore/TextbookSelection.do?st=489">http://lawrence-tech1.bkstore.com/bkstore/TextbookSelection.do?st=489</a>
ADDITIONAL RESOURCES	The instructor will post additional, topic specific, resources within each module.  LTU Online student resources: <a href="http://www.ltu.edu/ltuonline/currentonline.asp">http://www.ltu.edu/ltuonline/currentonline.asp</a>
TECHNICAL SUPPORT	Technical support for using Blackboard is provided by VITRC, 248.204.3750 or vitrc@ltu.edu



## COURSE SCHEDULE FOR COLLEGE OF MANAGEMENT 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 Week of Jan 7- Jan 9	Module 0	Overview of textbook Online Learning Orientation Course Orientation and group formation	Course orientation Instructor conversation Individual pre-assessment
Week of Jan 10- Jan 17	Module 1  Security, what it means?  Voice Systems Security	Review PBX Vulnerability Document  Read Instructor Posted Class Notes  Pay attention to news radio, TV, etc for Security Related issues.	**Autobiography Paper**  Bb Post regarding Instructor Posted Questions  Post News Event (Security)
Week of Jan 17 – Jan 23	Module 2  Network Security  Overview	Chapter 1 pages 3– 30  Read Instructor Posted Class Notes  Pay attention to news radio, TV, etc for Security Related issues.	**ID Theft Paper**  Bb Post regarding Instructor Posted Questions  Post News Event (Security)
Week of Jan 24 – Jan 30	Module 3 Risk Analysis & Defense Models	Chapter 2 pages 31– 45  Read Instructor Posted Class Notes  Pay attention to news radio, TV, etc for Security Related issues.	Bb Post regarding Instructor Posted Questions Post News Event (Security) Online Quiz Chapters 1 & 2
Week of Jan 31 – Feb 6	Module 4 Security Policy Development	Chapter 3 pages 47 – 79  Read Instructor Posted Class Notes  Pay attention to news radio, TV, etc for Security Related issues.	Bb Post regarding Instructor Posted Questions Post News Event (Security)  **Security Policy Paper**
Week of Feb 7 – Feb 13	Module 5 The Security Organization	Chapter 4 pages 81– 113  Read Instructor Posted Class Notes	Bb Post regarding Instructor Posted Questions Post News Event (Security)



Dates	Modules	Topics / Readings	Assignments Due
		Pay attention to news radio, TV, etc for Security Related issues.	Online Quiz Chapters 3 & 4
Week of Feb 14 – Feb 20	Module 6	Chapters 5 & 6 pages 117–152	Bb Post regarding Instructor Posted Questions
	Physical Security & Authentication / Authorization	Read Instructor Posted Class Notes	Post News Event (Security)
	, ruurenzauen	Pay attention to news radio, TV, etc for Security Related issues.	Online Quiz Chapters 5 & 6
Week of Feb 21 – Feb	Module 7	Chapter 7 & 8 pages 153 – 190	Bb Post regarding Instructor Posted Questions
27	Security Architecture, Security	Read Instructor Posted Class Notes	Post News Event (Security)
	Management	Pay attention to news radio, TV, etc for Security Related issues.	Online Quiz Chapters 7, 8 & 9
Week of Feb 28 – Mar	Module 8	Chapter 9 & 10 pages 193 – 227	Bb Post regarding Instructor Posted Questions
6	Network Design & Device Security	Read Instructor Posted Class Notes	Post News Event (Security)
		Pay attention to news radio, TV, etc for Security Related issues.	**Online Mid-Term Exam**
Week of Mar 7 – Mar 13	Spring Break		
Week of Mar 14 – Mar	Module 9	Chapter 11 & 12 pages 229 – 262	Bb Post regarding Instructor Posted Questions
20	Firewalls & VPNs	Read Instructor Posted Class Notes	Post News Event (Security)
		Pay attention to news radio, TV, etc for Security Related issues.	Online Quiz Chap 11 & 12
Week of Mar 21 – Mar	Module10	Chapter 13 & 14 pages 263 – 334	Bb Post regarding Instructor Posted Questions
Mar 21 – Mar 27	Wireless Security & Intrusion Detection	Read Instructor Posted Class Notes	Post News Event (Security)
	Betechon	Pay attention to news radio, TV, etc for Security Related issues.	Online Quiz Chap 13 & 14
Week of Mar 28- Apr 3	Module 11	Chapter 15 pages 335– 358	Bb Post regarding Instructor Posted Questions
Wiαi 20- Αρί 3	Integrity & Availability	Read Instructor Posted Class Notes Pay attention to news radio, TV,	Post News Event (Security)
		etc for Security Related issues.	**Business Effects Paper**



Dates	Modules	Topics / Readings	Assignments Due
Week of	Module 12	Instructor questions and posts	Bb Discussion Board
Apr 4 – Apr 10		will be light this week. Focus on completing the Group	Forums
		Paper.	Nothing Due This Week
Week of	Module 13	Chapter 27 pages 683 – 701	Bb Post regarding
Apr 11 – Apr	Discotor	Dood Instructor Dooted Class	Instructor Posted Questions
17	Disaster Recovery &	Read Instructor Posted Class Notes	Post News Event (Security)
	Business	Notes	Fost News Event (Security)
	Continuity	Pay attention to news radio, TV,	**Group Paper Due**
		etc for Security Related issues.	oroup rupor buo
Week of	Finals Week	Read Instructor Posted Class	Bb Post regarding
Apr 18 – Apr		Notes	Instructor Posted Questions
23	Course Summary		
	/ Final Exam	Post any final questions.	Post News Event (Security)
		Take Online Final Exam	**Online Final Exam**

# STUDENT EVALUATION

The course has four written assignments, 6 quizzes, a mid-term exam, group paper, and a final exam totaling 1110 points (left column). Letter grades are awarded based on the total number of points achieved (right column). Points are deducted for late assignments (one letter grade per week).

Assignments	Points
Individual Papers (4) 20Pts each	80
Online Quizzes (6) 100Pts each	600
Online posts/forums	130
Mid-term/Final 100Pts each Group Paper (1) 100 Pts	200 100
Total Points	1110

<b>Class Points</b>	Letter Grade
96 and above	Α
90 – 95	A-
87 – 89	B+
83 – 86	В
80 – 82	B-
77 – 79	C+
73 – 76	С
70 – 72	C-
61 – 70	D (Undergrad Only)
60 and below	Е

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



#### **EDUCATIONAL GOALS**

The purpose of this course is to introduce students to vulnerabilities within business communications, both voice and data. This particular course is somewhat technical in nature, however, is more geared towards the business manager, office manager, or other managerial positions directly responsible for the overall business voice and data communications. This course is not intended to make the students security experts, merely expose them to areas where lack of security awareness could be costly to the business.

#### STUDENT LEARNING OBJECTIVES / OUTCOMES

- What does security mean? What within a business should be secured and why? Who would want to damage a business and why? What is classified as a business asset?
- Voice and Data are equally important. Identify ways to protect the business voice systems. Identify what can happen and what liabilities a business may face if their voice system is compromised. What damage could occur if data assets are compromised?
- Learn how to protect, in the best way possible, internal, as well as external, voice and data network infrastructures. What level of access should employees, contractors, and management have to: the PBX room, server room, database access? Who will monitor and set policy regarding access?
- Identify external organizations that specialize in securing voice and data systems. How can a business protect itself if systems are compromised? What to do when the world begins to crumble around you?
- Can a business afford the costs of securing their network? Can a business afford not to secure their network? What would the costs be if productivity came to a stand still for just one day? What are Disaster Recovery and Business Resumption Planning?

### PREREQUISITE SKILLS

Familiarity with business IT infrastructure and the components that make up this LAN/WAN infrastructure would be helpful. Basic understanding is adequate for this course. It would be beneficial to have completed the Telecommunications course with the BSIT program prior to taking this class.

#### INSTRUCTIONAL METHODS AND COURSE ORGANIZATION

A variety of instructional methodologies are used in this course.

- 1. Instructor posted class notes.
- 2. "Strange but True" instructor experiences.
- 3. Podcasts.
- 4. Instructor posted questions weekly.

**Current News Events –** Students are expected to begin taking note of events that happen on a daily or weekly basis related to IT/IS Security issues. The purpose of this exercise is to raise awareness as to the consequences of inadequate Security and the impact it could have on the business. Post on Blackboard the news event in order to share with the class.

**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.

**Publisher Web Site** – A publisher web site at http://www.nnn.com/nnn includes instructional materials, PowerPoint slides, case studies, application exercises, and practice quizzes. You should make use of as many of these resources as you need to be successful.

**Assignments** – A word document entitled "Assignment Description" is posted on Blackboard under "Assignments". Any questions pertaining to the assignments should be emailed to the instructor.

#### **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 so I can store your address in my email directory.

Readings, discussion forum participation, and written assignments must be completed according to the class schedule. If business travel will take you away from regular participation, please clear the dates with me in advance.

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. Late work will be reduced in value.

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.



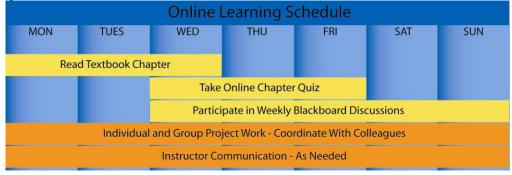
- I will treat all members of the class fairly, and will do my best to accommodate individual learning styles and special needs.
- If any of these points need clarification, or when special circumstances arise that require my assistance, please contact me so that we can discuss the matter personally.

#### PRACTICAL GUIDELINES FOR CLASS LOAD EXPECTATIONS

A three-credit course generally requires <u>at least</u> 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 guizzes. 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 can 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 Weekly Quizzes (100 Points Each)**

**Overview** – Quizzes will be given weekly. The intent of this assignment is to insure the assigned chapters are read as the questions are taken verbatim from the textbook. Each weekly quiz will be available to the student by 8:00 PM Sunday evening and will remain available throughout the week. One hour will be allowed to complete the quiz once it is started. The quizzes are expected to be open book; however it will certainly help if the chapter has been read before the quiz is started.

# Assignment: Individual Papers (4 each worth 20 points)

Overview- Please reference the "Assignment Description" document.

**Deliverables and Evaluation** – Students should post their paper via the Blackboard Assignments function by Friday of the week assigned. **Take note to follow the written paper expectations located in the Assignment Description document.** 

### Online Participation (130 points)

Each student is expected to actively participate in online activities. Class participation is evaluated to a maximum of 130 points based on:

Responding to all questions posted by the instructor during the timeframe of the module where posted. Active participation in open discussions within forums is expected and will be monitored.

### Group Paper, Mid-term, & Final Exams (300 points total)

Mid-term and Final Exams will be conducted just as the weekly quizzes in an online format. Timers will be set and reverse navigation will not be possible. Exams MUST be completed during the week assigned.

Full participation is expected with your assigned group partners for the group paper. Group specific forums will be created for the exchanging of ideas and information within the group. These forums will be monitored by the instructor for participation.

#### **SYLLABUS ADDENDA**

Please see the LTU Online "Current Students" web site <a href="http://www.ltu.edu/ltuonline/currentonline.asp">http://www.ltu.edu/ltuonline/currentonline.asp</a> 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 as 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 LTU Online web site regarding the use of the SafeAssign product.