Computer Science & Information System Department

Class Meeting:

CSCI-525-22114 is a Web Based Class. MANDATORY ONLINE ORIENTATION is required (please go to https://myleo.tamuc.edu/ to download/read a copy of this document.

Instructor Information:

Instructor:	Egedigwe Eges, Ph.D.
Office:	JOUR 122
E-mail:	Eges.egedigwe@tamuc.edu
Phone/Fax:	*Tel: 903.886.5409 Fax: 903.888.5404 www.tamuc.edu*
Office Hours:	M-F 8:30 – 9:30 am or by appointments (Make appointments via E-mail)
Course Web site Address:	Assignments & Other documents Available in: https://myleo.tamuc.edu/
Preferred Form of Communication	Email: Eges.egedigwe@tamuc.edu
Communication Resp. Time:	Weekdays: 12 hrs Weekend: 24 hr

COURSE INFORMATION

Course Description:

This course covers the basic principles and operations of Local Area Networks (LAN's). Such topics include basic data communications, the OSI model, protocols and topologies. Students will have the opportunity to gain "class room" experience with the installation, administration, and operating characteristics of such networking systems as Netware 3.12, Windows 2008, and Linux. Those wishing to take the various networking certification exams will find this course helpful. Three (3) semester hours. Prerequisites: Experience with Computer Programming or Permission of instructor. Graduate co-requisites: CSCI 515

Textbooks and Other Course Materials:

Textbook and Resources:	**Required Textbook/Lab Materials**: • **Title**: [KR] Computer Networking: A top-Down Approach • **Author**: James F. Kurose and Keith W. Ross • **Year**: © 2013, 6/E • **ISBN 10**: 0132856204 **ISBN 13**: 9780132856201 • **Publisher**: Addison-Wesley (Pearson). **Reference(s)**: • [ZA] Networks of Computer Scientists and Engineers. Youlu Zheng and Shaki Akhtar, Oxford University Press, 2001.

	• Guide to Connectivity 3rd Ed. Frank Derfler, Jr., Ziff-Davis Press, Emeryville, California. • Data Communications, Computer Networks, and Open Systems. Fred Halsall. Addison-Wesley, Menlo Park, Calif. • CNE Training Guide: Networking Technologies, 3rd. Ed. Debra Niedermiller-Chaffins, New Rider Publishing, Indianapolis, Indiana, 1994. May be ordered direct by calling 1-800-428-5331. ISBN 1562-05-3639. • Networking Essentials. 2nd. Ed. James Chellis. Sybex Network Press. ISBN 0-7821-2220-5 • Cisco Networking Academy Program: Second-Year Companion. Cisco Systems Press. 2nd ed. • Data Communication and Computer Networks for Computer Scientists and Engineers; **Year**: © 2003, 2/E; Author: Duck M. and Read R.; **Publisher**: Addison-Wesley (Pearson); ISBN-13: 978-0-13-093047-7, ISBN-10: 0-13-093047-4 **http://cpe.rmutt.ac.th/network/images/cn/%5B5%5DData%20Communications%20and%20Computer%20Networks.pdf**

Student Learning Outcomes:

Course Objectives/ Student Learning Outcomes:	After completing the course: 1. Students shall develop an understanding of basic Data Communications, networking topologies, the OSI Model and the IEEE 802 standards. Determined by 2. Students shall observe the installation and use of various networking platforms from the SPX/IPX and TCP/IP environment. Determined by 3. Student shall develop skills in IP subnetting, and understand the use of IP addresses, and the fundamentals of IP routing. Determined by 4. Through the integration of data communications, topologies, IEEE 803 standards, networking platforms, and subnetting, students shall develop a basic background of the components of a modem computer network. Determined by

COURSE REQUIREMENTS

EVALUATION PROCEDURE/GRADING (TENTATIVE):

Homework Assignment **30%** of total grade (3 HWKs)	**300**
Quizzes - **20%** (x quizzes totaling 200)	200
Exams/Tests: Exam/Test #1 (MidTerm1) **15%** (150) Exam/Test #2 (MidTerm2) **15%** (150) Exam/Test #3 (Final) **20%** (200)	500
Total Points (100%) Note: Your grade is based on 1000 points	**1000**

Grading Scale:

Your grade will be determined on what you earn on the class work. I do not give grades, you earn them. Remember that at the end of the semester. Your grades will be available to you on the on-line grade book. So you should know what grade you have at all times.

This class is designed to be "bottom heavy" in terms of grading. In other words, the first part of the class is for you to learn and make mistakes. The second half is for you to apply what you learned. Plan accordingly.

The following scale will convert your weighted numerical score into a letter grade. Fractional values are rounded up.

900 and above	800 - 899	700 - 799	600 - 699	below 600
A	B	C	D	F

To be converted to TAMUC Grade System:

90 and above	80 - 89	70 - 79	60 - 69	below 60
A	B	C	D	F

Evaluation criteria explained:
- Students are expected to be active participants in each class meeting. Full credit for participation will be extended to students who regularly ask questions, share observations, and contribute relevant personal experiences.
- The tests or examinations will consist of objective/written questions and will require a technological comprehension that covers the lecture material and assigned readings.

The assignments and class participations will consist of a number of individual in-class and homework tasks. Students will be given specific guidance on the amount of collaboration permitted for each assignment. Unless otherwise specified, all assignments are individual assignments, and thus must be completely the original work of the student submitting them and include proper citations to the published work of others.

Quizzes:

Quizzes will be given throughout the semester, at a rate of approximately one per chapter or two. Quizzes will always cover the material covered since the last quiz or exam. The quizzes will be combinations of objective and short-answer questions. Quizzes will be administered online via eCollege. Makeup quizzes will not be given. Any class material missed by the student is the student's responsibility to acquire. **Note**, the instructor will administer the **quizzes** used to determine your Quiz total points.

Examinations/Tests:

There are only 3 exams/tests, two mid-terms and the final - covering the material in the text, and in the lessons or handouts. They will be composed of both multiple-choice/true-false questions and/or written problems. You must take these exams and Quizzes by yourself with no help from anyone. Please see the "**COLLABORATION POLICY**" below. I reserve the right to require the exams to be proctored. Please study for the exams before you take them to help pass the tests/exams. Relying on slides and textbook during the test/quiz time should NOT work since you have a limited amount of time for the test/quiz, so study Chapter(s) thoroughly and try to be well prepared!

There will be **no make-up examinations**. It is the student's responsibility to arrange for an excused absence before the exam. A grade of zero will be assigned for all exams missed without an excused absence. If an emergency arises on the day of the test/exam, and the instructor deems that the absence is excused, then the student/instructor will arrange to replace the test missed. See the "**MAKEUP POLICY**" below.

Exams/Tests must be taken as scheduled. Final Exam/Test IS ALSO REQUIRED.   No exceptions. Each major exam will focus on material(s) covered since the previous exam, but may include topics previously covered. The final test is comprehensive.

Homework/Project Assignments ():
- You will complete all assignments and submit ON or BY the Deadline or Due Dates. Late submission of assignments will be assessed using the "**Late Policy**" below.
- Exercises, projects, labs, and other activities will be periodically assigned to reinforce the material in the text. These assignments will require the use of a computer.
- Projects/Labs must be done in Microsoft Office. Projects/Labs are only accepted in the course via the eCollege and NOT through **emai**l.

Class Participation (CP)/Discussion Questions (DQs) (if assigned):
Weekly/Daily participation in class and outside class will be assigned to enhance the learning process. Make efforts to complete and submit this on/before the due dates. This may come in the form of discussion questions via the Discussion forum of eCollege and/or individual/group participations in class or online.

There are 2 parts for BiWeeklyWeekly/Daily discussion (DQs):

Part I (50%) . For this part of the assignment, you will research and write an essay of two to four paragraphs (200 words minimum) on the required topic(s). The topics are located on the Discussion Forum section of eCollege (http://www.tamuc.edu/myleo.aspx). Please see the dates when they become available and when they are withdrawn. If you miss this date, you have lost that chance.
Include both in-text citations (inside the paragraphs) and references (at the end) that cite the materials you have researched. Search the Internet on how to cite references (both in-text and end-references) using the APA format)
  Provide examples where possible. A simple definition is not enough. Your explanation and description must be meaningful to a person without computer knowledge - always assume that you are writing for someone who is NOT in this class. If you have to use the Internet for your answers, please do so. Write in your own words - simple and meaningful. You must provide references – both in-text citations and at the end. Use the APA (American Psychological Association) style. You must provide at least 2 references (excluding the textbook we are using for this class). Points will be deducted if there are no references cited.

Part II (25% for each part). You must also respond to at least two (2) other students' participation/discussion. To receive a grade, your response must be meaningful and detailed enough (100 words minimum) for learning purposes - not just a single line of comment like - "Jane, I agree with you …….". If you agree or disagree with another student's posting or contribution, support your comments with additional contribution.

COURSE OUTLINE / CALENDAR

Schedule (Tentative)

WEEK	CONTENT	ASSIGNMENT	READING
1 (1/18)	Course introduction and overview Intro to computer networks (part 1	Quiz1	[KR] Ch1.1-1.3
2 (1/25)	Intro to computer networks (part 2) - internet delay model, protocol layering, net security	Quiz2	[KR] Ch1.4-1.6
3	Application layer (part 1)	Quiz3	[KR] Ch2.1-2.4

(1/1)	- HTTP, FTP, SMTP		
4 (2/8)	Application layer (part 2) - DNS, P2P, socket programming	Quiz4 HW#1 Out	[KR] Ch2.5-2.8
5 (2/15)	Transport layer (part 1) - Services, UDP, reliable data transfer	Quiz5 HW#1 Due (2/19)	[KR] Ch3.1-3.4
6 (2/29)	Midterm Exam/Test 1 (Scope: Chapter 1 – Chapter 3.4)	Scope: Weeks 1-5 topics	Due: Mar. 3, 2016
7 (3/21)	Transport layer (part 2) - TCP	Quiz6	[KR] Ch3.5
8 3/14	**Spring Break 3/14 – 3/18**	No Quiz	
9 (3/21)	Network layer (part 1) - Datagram, router architecture	Quiz7 HW#2 out	[KR] Ch 4.1-4.3
10 (3/28)	Network layer (part 2) - IP protocol	Quiz8 HW#2 Due (4/1)	[KR] Ch 4.4
11 (4/4)	Network layer (part 3) - Routing algorithms/protocols	No Quiz	[KR] Ch 4.5-4.6
12 (4/11)	Midterm Exam/Test 2 (Scope: Chps 4.1 - 4.6)	Scope: Week 7-9 topics	Due: April 14, 2016
13 (4/18)	Link layer (part 1) - Services, error detection/correction	Quiz9 HW#3 out	[KR] Ch5.1-5.2
14 (4/25)	Link layer (part 2) - Multiple access protocols	No quiz HW#3 Due (4/29)	[KR] Ch5.3
15 (5/2)	Link layer (part 3) - Switched LANs, VLANs	Quiz10 – 5.3/5.4	[KR] Ch5.4
16 (5/9)	Final Exam (Scope: Comprehensive Chps 1 – 5)	Comprehensive: Ch1-5	Due: May 10, 2016

SEMESTER CALENDAR	
MLK Day Holiday/**Last day to withdraw with a 100% refund**	January 18 (M)
Most Classes Begin	January 19 (T)
Labor Day Holiday	September 7 (M)
Spring Census Date	February 03 (W)
Spring Break - Business offices will be open, except 18 Mar (F).	March 14-18 (M-F)
Last day to withdraw with a grade of W	
Spring Last Class Day	May 6
Final Exam Week	May 7 – 13
Graduate Students Spring Graduation Ceremony	May 13
Semester Ends	May 13

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Institution Policies	
Late Policy	The deadline for any assignment can be extended with a 15% penalty per day. No deadline can be extended by more than two days. Assignments will NOT be accepted 48 hours after the due date. No technical excuse (e.g., eCollege technical problem).
Makeup Policy	There will be no makeup exams in general. Makeup exams may be given to students under extreme circumstances, such as hospitalization, serious injury, death in the family, etc, with prior notification *and* official documents.
Collaboration Policy	Students are encouraged to talk to each other, to the instructor, or to anyone else about any of the assignments. Any assistance, though, must be limited to discussion of the problem and sketching general approaches to a solution. *Each student must write out his or her own solutions to the homework.* Consulting another student's or group's solution is prohibited, and submitted solutions may not be copied from any source. These and any other form of collaboration on assignments constitute cheating. If you have any question about whether some activity would constitute cheating, please feel free to ask.
Academic Integrity	Your commitment as a student to learning is evidenced by your enrollment at Texas A &M University-Commerce. "All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (See Student's Guide Handbook, Policies and Procedure, Conduct). All phones, pagers, and other communication devices are to be turned off or place on silent mode during class. Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. <u>Anyone cheating will receive a zero on the work they are doing, and subsequent cheating will result in a failing grade.</u> All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (See Student's Guide Handbook, Policies and Procedures, Conduct).
Students With Disabilities	The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation

	of their disabilities. If you have a disability requiring an accommodation , please contact: Office of Student Disability Resources and Services Texas A&M University-Commerce Gee Library, Room 132 Phone (903) 886-5 ISO or (903) 886-5835 Fax (903) 468-8148 StudentDisabilityServices@tamu-commerce.edu
Basic Tenets of Common Decency	All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (Student's Guide Handbook, Policies and Procedures, Conduct.) This means that rude and/or disruptive behavior will not be tolerated.
Smoke, Vapor & Tobacco Free Environment:	University Procedure 34.05.99.Rl now prohibits the use of vapor/electronic cigarettes, smokeless tobacco, snuff and chewing tobacco inside and adjacent to any building owned, leased, or operated by A&M – Commerce.
Complying with federal and state laws	A&M-Commerce will comply in the classroom and in online courses with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.
Early Intervention for First Year Students	Early intervention for freshmen is designed to communicate the University's interest in their success and a willingness to participate fully to help students accomplish their academic objectives. The university through faculty advisors and mentors will assist students who may be experiencing difficulty to focus on improvement and course completion. This process will allow students to be knowledgeable about their academic progress early in the semester and will provide faculty and staff with useful data for assisting students and enhancing retention. Grade reports will be mailed by the end of the sixth week of the semester.
Student Conduct	All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See current Student Guidebook*).* Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette http://www.albion.com/netiquette/corerules.html
Nondiscrimination Notice	Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation,

	gender identity, or gender expression will be maintained.
Disclaimer Reserving Right to Change Syllabus	This syllabus is meant to provide general guidance of what to expect from this course. The instructor reserves the right to make changes as appropriate based on the progress of the class. All changes made to this syllabus during the semester will be announced. This document has been posted electronically. If you print a copy of it, please be sure to consult the last modified date of the online version to verify that your printed copy is current.

Please refer to the **Start Here** tab on eCollege for other details such as: TECHNOLOGY REQUIREMENTS, ACCESS AND NAVIGATION, FREE MobilE APPS, LearningStudio Notifications, and other instructions that will help you to get started.