MISR 3360 BUSINESS DATA COMMUNCATION SYSTEM EAGLE PASS OFFICE B 107
SESSION: FALL 2022 WEB PHONE 758-5015
Efraín Adames, MPA E-MAIL eadames@sulross.edu

OFFICE HOURS: TUESDAYS 8:00 AM – 10:00 PM OR BY APPOINTMENT

I will be available by phone, e-mail or in my office to offer help on any subject related to the course. As we progress in the course, I may make changes to this syllabus to accommodate any particular subject area. In that sense, this syllabus is a guideline, not a contract.

Required Text:
Business Data Communications and Networks 14e,
Jerry Fitzgerald and Alan Dennis, John Wiley & Sons ISBN Paperback 978-1-119-70284-9
EBook 978-1-119-70266-5

1. **Course Objectives:** The student will be able to:
    1. Be familiar with the history of communications, information systems, the internet and its major components and types of networks. Be aware of the applications of data communications networks. Understand the role of network layers. Be familiar with the role of network standards.

    Assessment: Written exam, written chapter exercises and demonstration exercises.

    2. Demonstrate knowledge of how the Web works. Understand host-based, client-based and client-server application architecture. Understand how e-mail works. Be familiar with how FTP, Telnet and instant messenger works. Be familiar with the different types of network circuits and media. Understand the different types of data transmission, digital transmission of digital data, analog transmission of digital data, and digital transmission of analog data. Understand how modems and multiplexing works.

    Assessment: Written exam, written chapter exercises and demonstration exercises.

    3. Understand the role of the data link layer. Become familiar with two basic approaches of controlling access to the media and with common sources of error and their prevention. Understand three common error detection and correction methods. Demonstrate knowledge of commonly used data link protocols. Be aware of four transport/network layer protocols. Describe how packetizing and linking to the application layer works. Be familiar with addressing and routing. Understand how TCP/IP works.

    Assessment: Written exam, written chapter exercises and demonstration exercises.

    4. Understand the roles of LANs in organizations. Understand the major components of LANs, traditional Ethernet LANs and switched Ethernet LANs. Identify the best practice recommendations for LAN design. Describe how to improve LAN performance. Understand the major components of WLANs. Be familiar with Wi-Max and Bluetooth WLANs. Describe how to improve WLAN performance. Be familiar with WLAN security. Identify the best practice recommendations for WLAN design. Understand the internetworking devices used in BNs and common backbone architectures. Be familiar with ATM and gigabit Ethernet.

Describe how to improve BN performance. Identify the best practice recommendations for backbone design.

Assessment: Written exam, written chapter exercises and demonstration exercises.

5. Understand circuit-switched services, dedicated-circuit services, packet-switch services and VPN services and their architectures. Identify the best practice recommendations for MAN/WAN design. Describe how to improve MAN and WAN performance. Understand the overall design of the internet. Be familiar with DSL, cable modem, and Wireless Application Protocol. Become familiar wikth the Internet 2.0.

Assessment: Written exam, written chapter exercises and demonstration exercises.

6. Identify the major threats to network security. Demonstrate knowledge on how to conduct risk assessment, how to conduct business continuity planning and how to prevent intrusion. Be familiar with the overall process of designing and implementing a network. Identify techniques for developing a logical network design and a physical network design. Understand the roles and functions of network management software and tools.

The Marketable Skills for the BBA are 4:

1. Students will have the ability to apply the principles of business they learn in the BBA to the management of existing businesses or the creation of new businesses
2. Students will have the ability to use research and analysis to make informed decisions
3. Students will have the ability to write business letters, emails, resumes and reports
4. Students will have the ability to make effective oral presentations to both professional and general audiences.

2. <u>Assessments</u>:

a. Assessment: Multiple Choice, True/False, Essay questions. Discussion Board. Written Papers.

b. Module assessments are due on the date in the syllabus course schedule. Exams are not cumulative (except to the extent that one part builds upon another). Pay attention to the exam instructions for content. **Exams are time limited, you can stop and resume but the clock keeps running.**

c. It is a policy for this course that after the due date there will be no make-up or reposition for the work required; this policy includes all assessments, meaning; homework, exercises, assignments, and exams. Late of partially completed work not accepted for grading purposes.

3. <u>Course Grading:</u>

The Blackboard does not take into consideration-missing grades (when the student does not take an assessment) when calculating the course grade. The student needs to be aware and manually calculate the grade if this is the case. Also for attendance purposes.

The projected cutoff point for As, Bs, Cs, and Ds are based on a 90%, 80%, 70%, and 60%, respectively.

Distance Education Statement: Students enrolled in distance education courses have equal access to the university's academic support services, library resources, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should submit online assignments through Blackboard or SRSU email, which require secure login information to verify students' identities and to protect students' information. *[If the course requires students to take proctored exams or to purchase additional software or equipment, please describe those requirements here.]* The procedures for filing a student complaint are included in the student handbook. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website.

Americans with Disabilities Act: Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student's responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Kathy Biddick in Student Services, Room C-102 Uvalde campus. The mailing address is 2623 Garner Field Road, Rio Grande College-Sul Ross State University, Uvalde, Texas 78801. Telephone: 830-279-3003. Email: kbiddick@sulross.edu .

CLASS SCHEDULE FOR MISY 3360, BUSINESS DATA COMMUNICATION SYSTEMS
(Assessments available until midnight on schedule due dates)

Date	Chapter	Module	Assignments and tests
Aug 30	1 Introduction to Data Communications	1	Complete assessment for Chapter 1. Assessment available on 8/22/2022
Sep 6	2 Application Layers	2	Complete assessment for Chapter 2. Assessment available on 8/30/2022
Sep 13	3 Physical Layer	3	Complete assessment for Chapter 3. Assessment available on 9/6/2022
Sep 20	4 Data Link Layer	4	Complete assessment for Chapter 4. Assessment available on 9/13/2022
Sep 27	5 Network and Transport Layers	5	Complete assessment for Chapter 5. Assessment available on 9/20/2022
Oct 4	6 Network Design	6	Complete assessment for Chapter 6. Assessment available on 9/27/2022
Oct 11	7 Wired and Wireless Local Area Networks	7	Complete assessment for Chapter 7. Assessment available on 10/4/2022
Oct 18	8 Backbone Networks	8	Complete assessment for Chapter 8. Assessment available on 10/11/2022
Oct 25	9 Wide Area Networks	9	Complete assessment for Chapter 9. Assessment available on 10/18/2022
Nov 1	10 The Internet	10	Complete assessment for Chapter 10. Assessment available on 10/25/2022
Nov 15	11 Network Security	11	Complete assessment for Chapter 11. Assessment available on 11/1/2022
Nov 29	12 Network Management	12	Complete assessment for Chapter 12. Assessment available on 11/1/2022.