

San José State University

School: Business
Department: MIS
Course Number: Bus 111
Title: Networking and Data Communications
Section: 3
Semester: Spring
Year: 2018

Instructor: Dr. R. Sridar
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Office Hours: Monday – 2:45 PM to 3:45 PM
Class Days/Time: Monday/Wednesday: 1:30 PM to 2:45 PM Section 3
Classroom: BBC 103
Prerequisites: Successful completion of Bus 92, Bus 110A, Bus 110B

Course Description

This course is designed to provide a learning experience on the concepts of architecture, components, protocols/standards pertaining to data communication within information networks. Students will be exposed to both technical as well as managerial aspects of communication networks. The objective of this learning experience is to help the students perform design/analysis of network applications that enable the enterprise to achieve its strategic goals of the business.

Course Goals and Student Learning Objectives

The learning objectives include:

- Identification and description of major standards (TCP/IP, OSI) of each network layer, hardware/software used to implement, and trends in new technology
- Identification and description of different types of network circuits and media, different types of transmission for digital/analog data, and multiplexing/inverse multiplexing
- Identification and description of various network technologies and the components – wired/wireless Local Area Network (LAN), backbone network, Metropolitan and Wide Area Network, Internet
- Identification and description of network management issues – Design(physical/Logical), Security, Network management tools
- Hands on experience in working with network commands, and use of software tools for network analysis/design
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Required Texts/Readings

Data Communications and Computer Networks: A Business User's Approach, Curt White,
8th Edition
ISBN: 978-1-305-11663-4

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. Information on add/drops are available at

<http://www.sjsu.edu/advising/faq/index.html>

Information about late drop is available at

<http://www.sjsu.edu/aars/policies/latedrops/>. Students should be aware of the current deadlines and penalties for adding and dropping classes.

Assignments

a. Presentation: Student team will make a 15 minutes class presentation on topics related to MIS - Topics will be provided during the second week of the semester.

b. Exams: One midterm exam and a final exam

c. Quizzes: 5 quizzes on the materials from text book, chapters included in the quiz will be notified in class.

d. Assignments: Three assignments involving hands-on practice on network commands, network design configurations and network design

e. Class Participation: This class will be very interactive and strongly encourage students to engage in dialogue with the rest of the class and instructor to share their real life experience related to Information Technology, Data communication.

Grading:

Deliverables	Points	Percentage of Final Grade
Presentation	50	14
Assignments	30	8
Quizzes	70	20
Midterm Exam	100	29
Final Exam	100	29
Total	350	100%

Grading Percentage Breakdown

93% and above	A
92% - 90%	A-
89% - 87%	B+
86% - 84%	B
83% - 80%	B-
79% - 77%	C+
76% - 74%	C
73% - 70%	C-
69% - 67%	D+
66% - 64%	D
63% - 60%	D-
below 60%	F

Above is standard breakdown of grade.

Classroom Protocol

Lucas College and Graduate School of Business: Program Goals and Class room policy

<http://www.sjsu.edu/cob/Students/policies/index.html>

University Policies (Required)

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page at](http://www.sjsu.edu/gup/syllabusinfo/) <http://www.sjsu.edu/gup/syllabusinfo/>

Lucas College and Graduate School of Business:

Mission: We are the institution of opportunity in Silicon Valley, educating future leaders through experiential learning and character development in a global business community and by conducting research that contributes to business theory, practice and education.

Course Schedule

Date	Topics	Readings/Assignment
1/24	Course Overview, Introduction, Basic Concepts	Ch. 1
1/29 , 1/31	Basic Concepts, Data and Signals, Digital and analog Transmission	Ch. 1, 2
2/5, 2/7	Conducted and Wireless media	Ch. 2, 3
2/12, 2/14	Multiplexing	Ch 3, 5 Assign A1
2/19, 2/21	Error Detection and Control	Ch 5, 6
2/26, 2/28	Local Area Networks	Ch. 7
3/5, 3/7	Local Area Networks Network Operating Systems	Ch. 7 Ch. 8
3/12, 3/14	Network Operating Systems Mid Term Review	Ch. 8 Due A1
3/19, 3/21	Internet Mid Term Exam (3/21)	Ch. 10, Assign A2

4/2, 4/4	Internet	Ch. 10
4/9, 4/11	Network Design and Management	Ch 13
4/16, 4/18	Network Security	Ch. 12, Due A2, Assign A3
4/23, 4/25	Voice and Data Delivery Network, Presentations	Ch 11
4/30, 5/2	Presentations	
5/7, 5/9	Presentations	
5/14	Presentations – Final Exam Review	Due A3
5/22	Final Exam BBC 103 12:15 – 14:30	