

**CSIS 202
Networks and Data Communications
Mt San Jacinto College**

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Course Website: <https://my.msjc.edu>

Meeting Information

Fully Online at <https://my.msjc.edu>



Please arrange a meeting atleast 24 hours in advance. Call me at (951) 639-5449 or email me at morloff@msjc.edu



MSJC is now providing email addresses to the students. I **strongly recommend that you become familiar with these services as all email communications that are initiated by the instructor will be sent to the your MSJC provided email address.**

Email Subject Naming Convention

With SPAM infiltrating our email accounts, I do not open emails that I do not recognize. Therefore, to ensure successful delivery of email communications sent to the instructor, please place the following in the subject field of your email message:

Subject: CSIS 202, <last name>, <subject of message>

So if John Doe were to send an email to me about Weekly Review Assignment 1, the subject would be the following:

Subject: CSIS 202, Doe, Question about WR-1

If your email requires a response, I will respond to your message within 72 hours of the posting. On average, my response time to your inquiries is much shorter than 72 hours, but this defines the 'upper limit' and you can plan accordingly.

Course Description

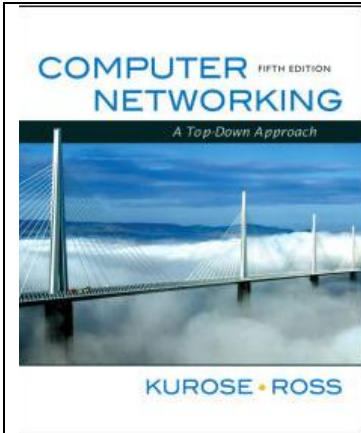
This course introduces students to fundamental data communication concepts including voice and data communications, networking hardware, the OSI model, and network design. Network management and security issues are also covered. This course is designed for the student who is interested in learning about data communications and networking as well as the career options that are available in this field.

Course Objectives

Upon completion of the course, the student will be able to do the following:

- Define computer networking, and discuss the advantages of using a network.
- Categorize the primary types of network cabling, differentiate between baseband and broadband transmissions, and identify appropriate uses for each.
- Define the term *packet*, and describe the contents and functions of each packet component: header, data, and trailer.
- Describe the primary function of each layer of the OSI reference model, identify the OSI layer at which a particular network activity takes place, and identify the OSI layer at which a particular network component functions.
- Design a successful network.
- Evaluate and select the appropriate media and hardware with which to construct a successful network.
- Assess a given network design for security considerations.

Textbook & Required Materials



Computer Networking, 5/e

James F. Kurose

Keith W. Ross

ISBN: 0-13-607967-9

A REQUIRED Student Access Card is found in the front of your new textbook. You will find an **Access Code** and instructions for accessing the site on this card.

If you do not have a valid Access Code or if you bought a used book, you can:

- **Purchase Access Now**

Using your Visa, MasterCard or American Express, you can [establish a subscription to this website now](#). This purchase will grant you access to the online materials.

- You WILL NOT receive shipment of a book or access code or any other print product as a result of an online purchase.

Internet Access

Prerequisites

None



ATTENDANCE POLICY

Being that this is an online class, there will be no designated time of attendance. It is the student's responsibility to participate in the online activities, meet deadlines, etc. If the student finds it necessary to drop the course, it is his/her responsibility to initiate the drop process (visit the student tools tab at my.msjc.edu). Should a student not access the course for **14 consecutive days** (available to instructor through access statistics), the instructor reserves the right to remove the student from the course. However, should the student not officially be removed from the course, a grade commiserate with the student's performance will be given at course completion.

Academic Honesty Policy

Please refer to the MSJC [Student Code of Conduct](#) located in the College Catalog.

Computer-Use Policy

Any student or user who wishes to use the computer facilities, including (but not limited to) Internet software or any Internet related services must read and agree to the MSJC [Acceptable Use Policy](#) and Computer Facility Rules.

Disabilities Policy

In compliance with the Americans with Disabilities Act (ADA), all qualified students enrolled in this course are entitled to reasonable accommodations. Please notify the instructor during the first week of class of any accommodations needed for the course.



ASSIGNMENTS

The following is a brief description of the course assignments that satisfy the course objectives:

CI Check In – Send me an email with an emergency phone/email contact, post to the Check in Board.
This is worth 10 points

WR Weekly Review - Weekly Review questions are directly related to concepts covered in both the assigned e-lecture(s) and reading(s). Each WR is worth 10 points.

AA Application Activity - Application Activities allow students to apply concepts reviewed in units through an activity that typically simulates real-world scenarios. Each AA is worth 30 Points.

DB Discussion Board - Each and every one of us provides a valued and unique perspective to the course. Each of us will have different experiences and, yet, still share common ones. Posting our thoughts, opinions and experiences on the Discussion Boards offer an additional view to consider and enhance the learning process. Each DB assignment will require the following:

- One (1) original thread (300-400 words) to an instructor provided prompt (10 points)
- Reply (100-200 words) to two (2) fellow classmate threads. (2 replies at 5 points each = 10 points)

Each original thread is worth 10 points. Each reply is worth 5 points. Therefore, each DB is worth a total of 20 points. 4 DBs will be assigned during the course totaling 120 points. The above are the minimum requirement to receive full credit. If you wish to post more, please do so. While you will not receive any extra credit for posting additional messages, you may learn more. **REMEMBER, YOU WILL GET AS MUCH OUT OF THIS COURSE AS YOU PUT IN!**

UE Assessment Test – An assessment of student progress will be conducted at specific intervals during the course. Assessment Tests consist of multiple choice, true/false, matching and essay questions. Each AT is worth 150 points. 2 ATs will be assigned during the course for a total of 300 points.

FE Final Exam - The Final Exam will assess a student's ability to apply course concepts to real world scenarios. It may include multiple choice, true/false/, matching, essay and performance based questions. **NOTE: Regardless of your standing in the class, you must submit a final exam to successfully pass the course.**

Assignment Submission Policy

Assignments are due weekly on Wednesdays at 6:00 pm. View the Course Calendar for details.

Assignments are to be submitted through the channels provided. **DO NOT SEND YOUR ASSIGNMENTS VIA EMAIL!!** See the Assignments link in the course website for details.

(subject to change):



Each activity/assignment is assigned a point value. Each submission will be graded and awarded points commiserate with the effort demonstrated. Locate your cumulative awarded points on the following grade scale to identify your final grade. Progress reports will be posted weekly. **If you identify any discrepancies in your grade report, it is your responsibility to report them to the instructor via email within one week of grade posting. Any discrepancies found past this fair deadline will not be addressed.**

<u>Activity/Assignment</u>	<u>Total Points</u>
CI Check In	10
WR Weekly Review (16)	160
AA Application Activity (5)	150
DB Discussion Boards (4)	80
AT Assessment Tests (2)	300
FE Final Exam (1)	<u>300</u>
Total	1000

Scale

900 - 1000	A
800 - 899	B
700 - 799	C
600 - 699	D

Make-Up Policy

Assignments/activities are due as specified in the class calendar (see below). A late submission - regardless of reason - is unsatisfactory in business and, therefore is unsatisfactory in this course. **However, while I discourage turning in any assignments past its deadline, I do understand that issues emerge. Therefore I am willing to accept late submissions (1 week maximum) of the following assignment types:**

- **WR Weekly Review**
- **AA Application Activity**

Still, a late submission is unsatisfactory. **This means that a late submission will be penalized 35% prior to being graded.** For example, if you turn in a late 10 point assignment that demonstrates excellent work (10 out of 10 points) it will be receive 6 out of 10 points. You have one week to turn in a late submission for credit. After the one week window expires, so does your opportunity to receive credit for a given assignment.

NOTE: Being an online class, I understand that technology may not always work seamlessly. However, the student is responsible to ensure timely submission with strong consideration for potential completion issues (e.g., technical, situational, personal, etc.). What does this mean? I suggest you do not wait until the last minute to complete an assignment as you may encounter technical difficulties. If the difficulties are a direct result of the MSJC systems, the burden of proof lies with the student. So, if you think you may encounter technical difficulties, be sure to print out submission receipts for justifying your case.



CLASS CALENDAR

(Tentative- subject to change)

Date	e-Lectures and Readings	Assignments/ Activities DUE Wednesdays 6 PM
Week 1 1/25-2/3	Begin Computer Networks and Internet Read the following sections of Chapter 1 in Text 1.1 What is the Internet? 1.2 The Network Edge 1.3 The Network Core	Check In (DUE 1/26) DUE by 2/3 6 pm: WR-1 DB-1 (1 original thread)
Week 2 2/3-2/10	Read the following sections of Chapter 1 in Text 1.4 Delay, Loss, and Throughput in Packet-Switched Networks	DUE by 2/10 6 pm: WR-2 DB-1 (2 replies)

	1.5 Protocol Layers and Their Service Models 1.6 Networks Under Attack 1.7 History of Computer Networking and the Internet	
Week 3 2/10-2/17	Begin Application Layer Read the following sections of Chapter 2 in Text: 2.1 Principles of Network Applications 2.2 Web and HTTP 2.3 File Transfer: FTP	DUE by 2/17 6 pm: WR-3 AA-1
Week 4 2/17-2/24	Read the following sections of Chapter 2 in Text: 2.4 E-Mail in the Internet 2.5 DNS- The Internet's Directory Service 2.6 Peer-to-Peer Applications	DUE by 2/24 6 pm: WR-4 AA-2
Week 5 2/24-3/3	Assessment Test- Chapters 1 and 2	DUE by 3/3 6 pm: AT-1
Week 6 3/3-3/10	Begin Transport Layer Read the following sections of Chapter	DUE by 3/10 6 pm:

	3 in Text: 3.1 Introduction and Transport Layer Services 3.2 Multiplexing and Demultiplexing 3.3 Connectionless Transport: UDP	WR-6 DB-2 (1 original thread)
Week 7 3/10-3/17	Read the following sections of Chapter 3 in Text: 3.4 Principles of Reliable Data Transfer 3.5 Connection-Oriented Transport: TCP 3.6 Principles of Congestion Control 3.7 TCP Congestion Control	DUE by 3/17 6 pm: WR-7 DB-2 (2 replies)
Week 8 3/17-3/24	Begin Network Layer Read the following sections of Chapter 4 in Text: 4.1 Introduction 4.2 Virtual Circuit and Datagram Networks 4.3 What's Inside of a Router?	DUE by 3/24 6 pm: WR-8 AA-3
3/29-4/2 - Spring Break		
Week 9 4/7-4/14	Read the following sections of Chapter 4 in Text: 4.4 IP: Forwarding and Addressing on the Internet 4.5 Routing in the Internet 4.6 Broadcast and Multicast Routing	DUE by 4/14 6 pm: WR-9 AA-4

<p>Week 10 4/14-4/21</p>	<p>Begin The Link Layer and Local Area Networks</p> <p>Read the following sections of Chapter 5 in Text:</p> <p>5.1 Introduction and Services 5.2 Error Detection and Correction Techniques 5.3 Multiple Access Protocols 5.4 Link Layer Addressing</p>	<p>DUE by 4/21 6 pm:</p> <p>WR-10</p> <p>DB-3 (1 original thread)</p>
<p>Week 11 4/21-4/28</p>	<p>Read the following sections of Chapter 5 in Text:</p> <p>5.5 Ethernet 5.6 Link Layer Switches 5.7 Point to Point Protocol 5.8 Link Virtualization 5.9 A Day in the Life of a Web Page Request</p>	<p>DUE by 4/28 6 pm:</p> <p>WR-11</p> <p>DB-3 (2 replies)</p>
<p>Week 12 4/28-5/5</p>	<p>Assessment Test - Chapters 3, 4, 5</p>	<p>DUE by 5/5 6 pm:</p> <p>AT-2</p>
<p>Week 13 5/5-5/12</p>	<p>Begin Wireless Networks</p> <p>Read the following sections of Chapter 6 in Text:</p> <p>6.1 Introduction 6.2 Wireless Links and Network</p>	<p>DUE by 5/12 6 pm:</p> <p>WR-13</p> <p>DB-4 (1 original thread)</p>

	Characteristics 6.3 WiFi: 802.11 Wireless LANs	
Week 14 5/12-5/19	Begin Security in Computer Networks Read the following sections of Chapter 8 in Text: 8.1 What is Network Security? 8.2 Principles of Cryptography 8.3 Message Integrity and End-Point Authentication	DUE by 5/19 6 pm: WR-14 DB-4 (2 replies)
Week 15 5/19-5/26	Read the following sections of Chapter 8 in Text: 8.4 Securing Email 8.5 Securing TCP: SSL 8.6 Network Layer Security 8.7 Securing Wireless LANs 8.8 Operational Security	DUE by 5/26 6 pm: WR-15 AA-5
Finals 5/26-6/2	Final Exam	DUE by 6/2 Final Exam