

**San José State University**  
**Computer Science Department**  
**CS 158-A, Computer Networks, Section 1, Spring 2019**

**Course and Contact Information**

<b>Instructor:</b>	Dr. Faramarz Mortezaie
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<b>Office Hours:</b>	T TH 7:30 AM - 8:00 AM Engineering classroom 337
<b>Class Days/Time:</b>	MW 7:30 - 8:45 AM
<b>Classroom:</b>	SCI 258
<b>Prerequisite:</b>	CS 146 Data Structures and Algorithms and CS 147 Computer Architecture with grade C- or better.

**Catalog Description**

Introduction to computer networks, including network layered architectures, local and wide area networks, mobile wireless networks, Internet TCP/IP protocol suite, network resource management, network programming, network performance, network security, network applications. Prerequisite: CS 146, and CS 147 or CMPE 120, (with grades of "C-" or better in each); or instructor consent.

**Canvas Course Site**

Course materials such as syllabus, textbook, assignments, questions of the week and exams can be found on the [Canvas Learning Management System course website](http://sjsu.instructure.com) at <http://sjsu.instructure.com>. You are responsible for regularly checking with Canvas to learn of any updates.

## Course Description

Introduction to computer networks, including network layered architectures, local and wide area networks, mobile wireless networks, Internet TCP/IP protocol suite, network resource management, network programming, network performance, network security, network applications.

## Course Learning Objectives (CLO)

CLO1	Have an ability to know the concepts and principles underlying the structures and designs of computer networks.
CLO2	Have an ability to understand network layered architectures and their associated benefits.
CLO3	Have an ability to understand the Internet TCP/IP protocol suite.
CLO4	Have an ability to know basic network programming, performance and diagnostic tools.

## Required Texts/Readings

### Textbook

Computer Networks by Andrew Tanenbaum and David Wetherall fifth Edition Prentice Hall/Pearson

## Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in [University Policy S12-3](http://www.sjsu.edu/senate/docs/S12-3.pdf) at <http://www.sjsu.edu/senate/docs/S12-3.pdf>.

NOTE that University policy F69-24, “Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.”

## Grading

Homework	20% (equally weighted)
Exam-1	25%
Exam-2	25%
Comprehensive Final Exam	30%

Grading policy: If you submit the assignment late: 30% to 50% will be deducted.

No late work after solutions are posted will be accepted.

## Course Grading Standards

I first try scores of 90, 80, and 70 to cut off letter grades of A-, B-, and C-, respectively. If overall class performance is too low to use these cut offs, I set a cut off of C- to a lower score than the class total average but a higher score than 60 (this number may change), and divide the students' group above the cut off of C- into A+, A, A-, B+, B, B-, C+, C, C-. The rest of students will be given by a grade of D+, D, D-, F or WU depending on their class performance.

Note that “All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades.” See [University Policy F13-1](http://www.sjsu.edu/senate/docs/F13-1.pdf) at <http://www.sjsu.edu/senate/docs/F13-1.pdf> for more details.

## Classroom Protocol

*Students are expected to participate all the lectures. Please turn off your cell phones during the lecture time.*

## University Policies

University Policies 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/>”

## CS 158A / Computer Networks / Spring 2019, Course Schedule

*The schedule is subject to change with fair notice announced in class.*

Week	Date	Topics	Reading Assignments and homework	Due Date
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1	01/28/19	Introduction	Chapter-1	
2	02/04/19 02/06/19	Physical Layer Physical Layer	Chapter-2 Homework-1	2/11
3	02/11/19 02/13/19	Data Link Layer Data Link Layer	Chapter-3 Homework-2	2/18
4	02/18/19 02/20/19	Data Link Layer Data Link Layer	Chapter-3 Homework-3	2/25
5	02/25/19 02/27/19	Data Link Layer Data Link Layer	Chapter-3 Homework-4	3/04
6	03/04/19 03/06/19	Review Exam-1	Chapters 1 to 3	3/11
7	03/11/19 03/13/19	Medium Access Control Medium Access Control	Chapter-4 Homework-5	3/18
8	03/18/19 03/20/19	Medium Access Control Medium Access Control	Chapter-4 and 5 Homework-6	3/25
9	03/25/19 03/27/19	Network Layer Network Layer	Chapter-5 Homework-7	4/08
10	04/01/19 04/03/18	Spring Recess No Classes		
11	04/08/19 04/10/19	Network Layer Network Layer	Chapter-5 Homework-8	4/15
12	04/15/19 04/17/19	Review Exam-2	Chapters 4 and 5	
13	04/22/19 04/24/19	Transport Layer Transport Layer	Chapter-6 Homework-9	4/29
14	04/29/19 05/01/19	Transport Layer Application Layer	Chapters 6 and 7 Homework-10	5/06
15	05/06/19 05/08/19	Application Layer Application Layer	Chapter-7	
16	05/13/19	Review		
18	05/21/19	Final Exam	7:15 – 9:30 AM (Tuesday)	