

San José State University
Electrical Engineering Department
EE281, Internetworking, Section 02, Fall 2017

Course and Contact Information

Instructor:	Navid Ghazisaidi, PhD
Office Location:	ENG 383
Telephone:	(408) 924-3950
Email:	navid.ghazisaidi@sjsu.edu
Office Hours:	MW 19:15-19:45
Class Days/Time:	MW 18:00-19:15
Classroom:	ENG 345
Prerequisites:	EE 210 and EE250

Web Page

Course materials such as syllabus, slides, assignments, etc. can be found at:

<https://sites.google.com/site/navidghazisaidi/sjsu-ee281-materials>

Course Description

Network layers, packet networks, ATM, SONET, TCP/IP protocols, high-performance switches and routers, queuing theory, error detection coding, quality of service, multicast, IPv6.

<http://info.sjsu.edu/web-dbgen/catalog/courses/EE281.html>

Required Texts/Readings

Required

James F. Kurose, Keith W. Ross, Computer Networking: A Top-Down Approach (7th Edition), ISBN-10: 0-13-359414-9

Other Readings

Alberto Leon-Garcia, Indra Widjaja, Communication Networks: Fundamental Concepts and Key Architectures (2nd Edition), ISBN-10: 0-07246352-X

Course Requirements and Assignments

Homework and lab assignments will be given regularly. The due dates of homework assignments are specified in the schedule (handed over in person). Late homework delivery will not be accepted.

The exam and lab assignments require the student to have a personal computer that is installed with a modern operating system (such as MS Windows, Mac OSX, or Linux). The personal computer must be able to connect to Internet via WiFi.

Midterm and Final Examinations

All exams are closed book/notes. The exams will be taken using Canvas and LockDown Browser.

Grading Information

Homeworks	15%
Lab Assignments	15%
Midterm Exam 1	20%
Midterm Exam 2	20%
Final Exam	30%

Grade Overall Score

A+	98-100
A	94-97.99
A-	90-93.99
B+	85-89.99
B	75-84.99
B-	70-74.99
C	60-69.99
D	50-59.99
F	0-49.99

Classroom Protocol

Students will turn their cell phones off or put them on vibrate mode while in class. They will not answer their phones in class. Students whose phones disrupt the class and do not stop when requested by the instructor will be referred to the Judicial Affairs Officer of the University.

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](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>.

Academic integrity

Students should know that the University's Academic Integrity Policy is available at http://www.sa.sjsu.edu/download/judicial_affairs/Academic_Integrity_Policy_S07-2.pdf. Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's integrity policy, require you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The website for Student Conduct and Ethical Development is available at http://www.sa.sjsu.edu/judicial_affairs/index.html. 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. If you would like to include in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 requires approval of instructors.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the DRC (Disability Resource Center) to establish a record of their disability.

EE Department Honor Code

The Electrical Engineering Department will enforce the following Honor Code that must be read and accepted by all students.

“I have read the Honor Code and agree with its provisions. My continued enrollment in this course constitutes full acceptance of this code. I will NOT:

- Take an exam in place of someone else, or have someone take an exam in my place
- Give information or receive information from another person during an exam
- Use more reference material during an exam than is allowed by the instructor
- Obtain a copy of an exam prior to the time it is given
- Alter an exam after it has been graded and then return it to the instructor for re-grading
- Leave the exam room without returning the exam to the instructor.”

Measures Dealing with Occurrences of Cheating

- Department policy mandates that the student or students involved in cheating will receive an “F” on that evaluation instrument (paper, exam, project, homework, etc.) and will be reported to the Department and the University.
- A student’s second offense in any course will result in a Department recommendation of suspension from the University.

San José State University
Electrical Engineering Department
EE281, Internetworking, Section 02, Fall 2017

Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	08/21	No class
1	08/23	Introduction to the class (overview of the course)
2	08/28	Internet, network edge, network core
2	08/30	Network performance, protocol layers – <i>homework #1</i>
3	09/04	No class (Labor Day)
3	09/06	Lab session #1 (introduction) – <i>lab assignment #1</i>
4	09/11	Application layer – <i>homework #1 due date</i>
4	09/13	HTTP – <i>lab assignment #1 due date</i>
5	09/18	FTP, SMTP, POP3, IMAP – <i>lab assignment #2</i>
5	09/20	DNS, P2P – <i>homework #2</i>
6	09/25	Self review
6	09/27	Midterm Exam 1 (Wednesday, September 27, 2017, 6:00pm – 7:00pm)
7	10/02	Transport layer, MUX, DEMUX, UDP – <i>lab assignment #2 due date</i>
7	10/04	TCP – <i>homework #2 due date</i>
8	10/09	Congestion control – <i>homework #3 – lab assignment #3</i>
8	10/11	Network layer
9	10/16	IPv4, DHCP – <i>homework #3 due date</i>
9	10/18	NAT, ICMP, IPv6 – <i>homework #4 – lab assignment #3 due date</i>
10	10/23	Routing algorithms (part1: link-state)
10	10/25	Routing algorithms (part2: distance-vector, hierarchical) – <i>lab assignment #4</i>
11	10/30	Self review
11	11/01	Midterm Exam 2 (Wednesday, November 1, 2017, 6:00pm – 7:00pm)
12	11/06	RIP, OSPF
12	11/08	BGP – <i>homework #4 due date</i>
13	11/13	Broadcast & multicast routing – <i>homework #5</i>
13	11/15	Link layer, error detection – <i>lab assignment #4 due date</i>
14	11/20	MAC – <i>homework #5 due date</i>
14	11/22	No class (Pre-Thanksgiving Holiday)

Week	Date	Topics, Readings, Assignments, Deadlines
15	11/27	Lab session #2 (Q&A) – <i>lab assignment #5</i>
15	11/29	ARP, Ethernet
16	12/04	VLAN, MPLS
16	12/06	Router architecture, SDN, OpenFlow – <i>lab assignment #5 due date</i>
17	12/11	Self review
17	12/13	Final Exam (Wednesday, December 13, 2017, 5:15pm – 6:45pm)