San José State University
School of Science/Department of Computer Science
CS 268-01 Topics in Wireless Mobile Networking, Fall Semester, 2022

Course and Contact Information

Instructor:	Navrati Saxena
Office Location:	MH 214 MacQuarrie Hall
Telephone:	(408) (924-5121)
Email:	navrati.saxena@sjsu.edu
Office Hours:	Tuesday, 9 AM ~ 11 AM PST (Days and time) [If the office hours does not suit you, please email me and I will be happy to setup a zoom meeting with you]
Class Days/Time:	Monday/Wednesday; 9 AM ~ 10.15 AM
Classroom:	MacQuarrie Hall 222
Prerequisites:	CS 158A
COVID-19 and Monkeypox	Students registered for a College of Science (CoS) class with an in-person component should view the CoS COVID-19 and Monkeypox Training (Links to an external site.) slides for updated CoS, SJSU, county, state and federal information and guidelines, and more information can be found on the SJSU Health Advisories (Links to an external site.) website. By working together to follow these safety practices, we can keep our college safer. Failure to follow safety practice(s) outlined in the training, the SJSU Health Advisories website, or instructions from instructors, TAs or CoS Safety Staff may result in dismissal from CoS buildings, facilities or field sites. Updates will be implemented as changes occur (and posted to the same links).

Course Description

Advanced topics in the area of wireless mobile networking. Possible topics include: wireless local area networks, wireless sensor networks, mobile computing, cellular networks etc.

Course Format

Technology Intensive, Online Course
1. In class each student is required to have an internet-connected device (e.g. smartphone, tablet, laptop computer) to be used exclusively for learning-related activities. In addition a microphone and webcam will be needed if they are not inbuilt in the internet-connected device.
2. This course utilizes the Learning Management System (LMS), Canvas. General information about the LMS can be found at the eCampus website - http://www.sjsu.edu/at/ec
3. Any operating system which can support pdf files, SJSU canvas software, and Microsoft office is needed.

MYSJSU Messaging

1. Course materials such as syllabus, handouts, notes, assignment instructions, announcements etc. can be found on Canvas Learning Management System course login website. All communications relevant to the course will be sent out using the Canvas messaging system (Canvas email and announcement board).
2. Students are responsible for regularly checking with the messaging system through Canvas to learn of any updates.
3. For help with using Canvas see Canvas Student Resources page (http://www.sjsu.edu/ecampus/teaching-tools/canvas/student_resources) or reach out to Technical Support for Canvas: Email: ecampus@sjsu.edu; Phone: (408) 924-2337; https://www.sjsu.edu/ecampus/support/

Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:

1. Understand the concepts of wireless communications and wireless networking
2. Solve problems associated with modulation and coding schemes
3. Learn cellular concepts, e.g. frequency reuse and multiple access technologies
4. Understand cellular evolution from 1G to 5G and associated mobility management
5. Develop knowledge on wireless LANs and its evolution
6. Learn reading good research papers in wireless networks
7. Solve fundamental problems in wireless networks
8. Develop skills to present research papers and solutions in wireless networks

Required Texts/Readings
Textbook
No fixed text books. Study materials, including some research papers on wireless networks will be provided on the Canvas site.

Suggested Reading:
1. Wireless Communications: Principles and Practice, Theodore S. Rappaport

Library Liaison
Megwalu, Anamika
Phone: 408-808-2089
Email: anamika.megwalu@sjsu.edu

Course Requirements, Assignments, and Grades

1. Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities.
2. This course requires students to go through the lecture materials in details.

3. Problems on mobile, wireless networks and corresponding analysis will be provided in the lecture materials.
4. Students are expected to develop their skills and do similar problems and analysis on their own.
5. Attainment of the learning objectives (as listed above) will be assessed via in-class activities, three quizzes, and the final-term examination.
6. The course will have three quizzes, and one Final-term research presentation. Weights of these are given below. Their tentative schedule could be found in the week-wise schedule of the course (at the end of this document).

Assessment Type	Weightage
Quiz 1	20%
Quiz 2	20%
Quiz 3	20%
End Term Research Plan	10%
End Term Research Presentation	20%
End Term Presentation File	10%

Class Participation/In-class Activities

1. You will be presented with in-class exercises/activities in synchronous class sessions to be completed individually or in groups.
2. These in-class exercises will be due at the end of class
3. These exercises are intended to serve as a review to help you and the instructor assess learning in the class.

NOTE that University policy F69-24 at http://www.sjsu.edu/senate/docs/F69-24.pdf states that "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."

Assignments, Examinations or Evaluation

The course will have graded: three quizzes, and a final-term. Their percentage weightage are mentioned above. The syllabus of the quizzes and examinations will be posted in Canvas. Quizzes and Examinations may include multiple-choice questions, open-ended questions, and problems. The dates of the examinations and quizzes are indicated in the Lecture Schedule.

Make-up exams and quizzes will be granted only for extenuating circumstances. Contact the instructor as soon as possible during the semester if you have such a circumstance. Absence from examinations and quizzes without prior approval will result in a score of 0.

The benchmarks of the grades are mentioned in the table below.

Grade	Percentage
A plus	95% to 100%
A	90% to 94%
B plus	85% to 89 %
B	80% to 84%
C plus	75% to 79%
C	70% to 74%
D plus	65% to 69%
D	60% to 64%
F	< 60%

Regrades

If you believe an error was made in the grading of your quiz or exam, you may request a regrade from me, Professor Saxena, either during my zoom office hours (preferred) or by sending me an email. A request for a regrade must be made no more than a week after the quiz or exam is returned.

Classroom Protocol

Students are not allowed to record or take pictures in the class without instructor permission.
Students are prohibited from recording class activities (including lectures, office hours, advising sessions, etc.), distributing class recordings, or posting class recordings. Materials created by the instructor for the course (syllabi, lectures and lecture notes, presentations, etc.) are copyrighted by the instructor. This university policy (S12-7) is in place to protect the privacy of the students in the course, as well as to maintain academic integrity through reducing the instances of cheating. Students who record, distribute, or post these materials will be referred to the Student Conduct and Ethical Development office. Unauthorized recording may violate university and state law. It is the responsibility of students that require special accommodations or assistive technology due to a disability to notify the instructor.

Attendance and arrival times

Attendance in class is not mandatory and shall not be used per se as a criterion for grading. However, class attendance and participation are highly recommended.

Behavior

Students should remain respectful of each other at all times. Interruptive or disruptive attitudes are discouraged. During the sessions, the use of electronic devices (laptops, tablets, and smartphones) should be limited to activities closely related to the learning objectives. All cell phones must be silenced prior to entering the synchronous sessions. Students are encouraged to keep their webcams "ON" as much as possible.

Students are expected to respect a diversity of opinions, ethnicities, cultures, and religious backgrounds.

Safety

Students should familiarize themselves with all emergency exits and evacuation plans.

Communication with the instructor

Students are encouraged to approach the instructor, Prof. Navrati Saxena, in case of any doubts or issues. Best way to approach her is to meet her during her office hours or to mail her and request for a zoom meeting. She usually responds within 2 working days. In the subject of the mail, do specify if the matter is urgent and needs immediate attention. Please start the subject of your email by the course code.

University Policies and Procedures

Per University Policy S16-9 (http://www.sjsu.edu/senate/docs/S16-9.pdf), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on Syllabus Information web page (http://www.sjsu.edu/gup/syllabusinfo), which is hosted by the Office of Undergraduate Education. Make sure to visit this page to review and be aware of these university policies and resources

Academic Integrity

For this class, you should obviously not cheat on tests. At a minimum a 0 on the quiz or exam will be given. A student caught using resources like Rent-a-coder will receive an F for the course. Faculty members are required to report all infractions to the Office of Student Conduct and Ethical Development. All quizzes and exams that a student submits will be checked by turn-it-in for plagiarism.

Accommodations

If you need a classroom accommodation for this class, and have registered with the Accessible Education Center (https://www.sjsu.edu/aec/), please come see me earlier rather than later in the semester to give me a heads up on how to be of assistance. Your experience in this class is important to me. If you have already established accommodations with Student Accessibility Services, please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course.

Calendar: We will strictly follow the following SJSU calendar for add/drop/any other related deadlines; holidays; final exam schedule etc.

Calendar: https://www.sjsu.edu/registrar/calendar/fall-2022.php

Holidays: https://www.sjsu.edu/classes/calendar/2022-2023.php

Final Exam Schedule: https://www.sjsu.edu/classes/final-exam-schedule/fall-2022.php