# SANTA CLARA UNIVERSITY COMPUTER ENINEERING DEPARTMENT

# Wireless & Mobile Networks COEN 331

**Summer 2021** 

# Dr. Keyvan Moataghed

**Office Hours:** After class or by appointment

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#### 1. OBJECTIVES:

Extend the knowledge of students in wireless computer networking, such as technologies for broadband Wireless LAN, MAN, WAN, WAP, Zigbee, RFID, Wireless VoIP, SS7, Satellite networks, GSM, GPRS, CDMA, WCDMA, and wireless signaling protocols.

#### **2. PREREQUSITES:**

COEN 233 or equivalent

#### 3. Text Books:

802.11 Wireless Networks Author: Matthew S. Gast

Publisher: O'Reilly ISBN: 0-596-10052-3

GSM Networks, Protocols, Terminology, And Implementation

Author: Gunnar Heine Publisher: Artech House ISBN: 0-89006-471-7

## 4. Recommended REFERENCE Books:

Wireless and Mobile Networks Architectures

Author: Yi-Bing Lin Publisher: Wiley

ISBN: 0-471-39492-0

**Satellite Communications Systems** 

Author: Gerard Maral Publisher: Wiley

ISBN: 0-471-49654-5

## **5. PROJECT:**

Each student should participate in a project about one of the announced topics. The project is focusing on the most recent subjects of wireless networks and consists of **35 pages**. The project weights 30% of the overall grade.

#### **6. TESTS:**

Two closed book/notes exams will be given, with each weighted at 35% of the overall score.

# **7.GRADING:**

Grading will be approximately as follows. Any category may be changed by +/- 5% at discretion of the instructor.

Note 1: In order to receive a PASSING GRADE from this course one must:

- a) Work on a project.
- b) Receive passing grades from written test exams.

Note 2: No makeup exams will be given.