



COMSATS Institute of Information Technology, Abbottabad
Department of Computer Science

Course: CSC – Mobile Communication (3,0)
(Fall 2015)

Office: Z-Block (Z-359)
Instructor: Rab Nawaz Jadoon
(Assistant Professor)
Office hours: (9.00 am to 5.00 pm)
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Course Objectives

1. To study the technical issues and state-of-the-art techniques in the operation and management of mobile communications networks;
2. To learn the engineering principles and system evaluation methods used in the design of mobile communications networks.

Required Text Books

1. Mobile Communication by Jochen Schiller
2. Adhoc Wireless Networks: Architecture and Protocols by C. Siva Ram Murthy and B. S. Minog

Lectures Handouts:

For **Course Related Updates** kindly visit the following link,

<https://jadoon956.wordpress.com/networks/>

Course Contents

1. Overview of wireless communications
2. Cellular wireless networks
3. 1G, 2G, 2.5G, 3G and 4G cellular networks
4. Wireless local area networks (Wi-Fi)
5. Wireless wireline interworking, Mobile IP
6. Mobile adhoc networks (MANET)
7. Wireless personal area networks (Bluetooth, UWB, ZigBee)
8. Wireless sensor networks
9. Mobility management and radio resource management
10. Traffic models and mobility models
11. Multiple access techniques
12. Overview of Cognitive Radio

Evaluation methods

Assignment/Quizzes → 25%

First Sessional → 10%

Second Sessional → 15%

Final Term → 50%

Rules and policy in this class

1. Although the rules and policy defined here may seem a little bit rush, they are not meant to cause any harm to you instead to protect you and to prepare you for better life and to become professionals.
2. Students are not allowed to bring their family members for day care or baby sitting. The classroom is not a place for children.
3. Student behavior/classroom decorum: "Free discussion, inquiry, and expression are encouraged this class." However, classroom behavior that interferes with either the instructor's ability to conduct the classroom or the ability of students to benefit from the instruction is not acceptable.
4. Please turn off (or place on silence) your beepers and cellular phones before the lecture starts. In the event of a situation where student legitimately needs to carry a beeper/cellular telephone to class, prior notice and approval of the instructor is required.
5. No use of electronic devices while in class unless required or approved by the instructor.
6. Classroom behavior which is deemed inappropriate and cannot be resolved by the student and the faculty member may be referred to the Office of DCO, 1st Floor C-Block;

telephone (851), for administrative or disciplinary review as per the code of Students Conduct.

7. As part of the academic integrity outlined in the current General Catalogue: "Students are expected to maintain the highest standards of academic integrity. Behavior that violates these standards is not acceptable.
8. Students are NOT allowed to share their assignments and to communicate during the tests or exam.
9. No student is allowed in the class if not officially registered in this class.
10. Late assignment will be penalized as follow after the assignment due date and time: 10% off the first day, 25% off the second day, 50% off the third day, and "Zero" after that. All the assignments will be due in class on the specified due date.
11. No makeup test or exam will be given except in the case of emergency such as the student being sick and he/she is unable to come to class in which case an official Doctor's excuse MUST be presented to the instructor. The student concerned is required to take the make up test/exam no later than two lectures or class periods after he/she returns to class. Failure to comply will result in the grade of zero (0) for the test/exam.
12. All students are encouraged to attend class and on time. I will be taking rolls randomly. A total of five (6) absences will result in the grade of "F" in this class for the student(s) concerned.
13. It is totally forbidden to voice or/and video record this course lecture presentations without a written agreement signed and dated between the student and the instructor. Any violation to this rule will result to the invasion of the instructor privacy.
14. Finally, I am totally open to any constructive critics or/and suggestions.

Emergency Evacuation

In the case of fire or emergency, please do not panic and simply follow your instructor's emergency procedure evacuations.