

**ECE G 364 Mobile and Wireless Networking
Spring 2004**

SYLLABUS

The class meets Monday and Wednesday from 11:40am to 1:20pm in Robinson 109.

Instructor:

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Office hours: Wednesday, 2pm–4pm.

Prerequisites: Basics on general networking.

Textbook: (1) *Wireless and Mobile Network Architectures*, Yi-Bing Lin and Imrich Chlamtac, John Wiley and Sons, 2001. (2) Notes from the instructor.

Course Objectives: To introduce to the fundamental techniques and protocols of the two main wireless networks architectures, namely cellular networks (second and third generation systems) and ad hoc networks. The course examines the characterizing aspects of these wireless architectures and introduces to related problems and solutions.

Topics: Mobile Ad Hoc Networks: MAC layer solutions, multipoint communication protocols (routing, multicast, broadcast), clustering protocols. Enabling Technologies: Bluetooth and IEEE 802.11. Cellular systems: mobility management and signaling within mobile networks, common air interfaces. IS-41, GSM and wireless data networking (CDPD).

Grades: Homework: 30%. Final: 70%.

Student Responsibilities: Homeworks are due in class on the specified date. Turn in what is completed by the deadline for partial credits. No late submission will be accepted. (“No shows” will obtain 0 points.) *If k is the total number of homework assigned, at least $\lceil \frac{k}{2} \rceil$ of the homework have to be turned in for passing the class with more than a B.*

All submissions must be your own work. Identical, or semi-identical assignments will not be accepted.

Class attendance is responsibility of each individual. If a student should elect not to attend a class, s/he is responsible for any handouts, announcements, reading material and content of missed lecture.

Scholastic dishonesty (e.g., cheating, plagiarism, collusion, record falsification, etc.) will be punished according to NU policies and standards.

The present syllabus is intended as an outline of the class and it is subject to modifications. Up-to-date information will be posted in the class web page.

Further information can be found at: <http://www.ece.neu.edu/courses/eceg364/2004sp/>