0961學期 課程基本資料

系所/年級：資工系碩士班 1年級
課號/班別：65M00036 / A

學分數：3學分
選/必修：選

科目中文名稱：無線網路
科目英文名稱：Wireless Networks

主要授課老師：陳啟東
開課期間：一學期

人數上限：5人
已選人數：5人

起始週/結束週/上課地點/上課時間

第1週/第18週 / I427 / 星期2第05節
第1週/第18週 / I427 / 星期2第06節
第1週/第18週 / I427 / 星期2第07節

教學綱要

一、教學目標(Objective)

二、先修科目(Pre Course)

三、教材內容(Outline)
The field of wireless networks has become one of the fastest growing segments of the telecommunication industry. Wireless communication systems, such as cellular networks, satellite, wireless local area networks, and ad hoc networks have found widespread use. This popularity of wireless communication systems is due to its advantages compared to wireline systems. The important advantages are the freedom from cables and the ability to communicate anywhere. This course will cover recent advances in wireless networks. It will stress on the research aspect of wireless networks. It will explore the key topics in the field of cellular networks, personal area networks, wireless local area networks, ad hoc networks, satellite networks, all-IP networks, and next generation wireless networks. The key topics will include: 1) Introduction (communication networks & TCP/IP)  2) Radio propagation (path loss, fading, and multipath)  3) Multiple access techniques  4) Cellular networks & cellular concept  5) Personal area networks (PAN)  6) Wireless local area networks (WLAN)  7) Ad hoc networks  8) Cellular IP  9) Mobile IP  10) Satellite networks  11) Location service, geolocation system, and global position system (GPS)  12) Multicasting/Geocasting in wireless networks  13) All-IP networks  14) Next generation wireless networks

五、參考書目(Reference)
六、教學進度 (Syllabi)

七、評量方式 (Evaluation)

八、講義位址 (http://)

九、教育目標