

SPRING 2004, The City College of New York

EE G0800: Telecommunications Network Element Engineering

Sec. 3GH Wed 5:00-7:45 pm

Pre/Co-requisite: EE460 (or equivalent)

Instructor: Prof. M. Ümit Uyar, **Office** T672, **Ext:** 5632

Office hours: Wed-Thu 4:00-5:00 pm, or by appointment.

Text: Telecommunications Network Management, H. Wang, McGraw-Hill , 1999.

Course description and content: The main objective of this course is to provide an introduction to a broad spectrum of network and element level management protocols, software entities, and information databases. Students will gain theoretical and practical knowledge of SNMP and OSI management concepts to prepare them for their industrial or academic careers. Topics include management network architectures, protocols, modeling, information databases, network management applications (such as Configuration, Fault, and Performance management), and telecommunications management network fundamentals.

Motivation: The explosive growth of the network management services in industry will make this course very attractive both for our graduate students and for students from industry.

Grading

- **Midterm Exam (open notes, book): 30% of grade**
- **Project: 30% of grade**
- **Final Exam (open notes, book): 40% of grade**

Course Material

- Telecommunications Management Network (TMN)
- Simple Network Management Protocol (SNMP)
- SNMPv2 and RMON
- Information Modeling
- OSI NM
- Generic Information Models
- Configuration Management
- Fault Management
- Performance Management
- Accounting Management