

Course Syllabus

Course Information

CS6368 - Telecommunications Network Management

Instructor Contact Information

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Course Pre-requisites, Co-requisites, and/or Other Restrictions

One of CS5390 and CS6390, or CS6385.
Prerequisite will be strictly enforced.

Course Description

This graduate course is an in-depth study of the telecommunication network management technology and systems. Its main focus is on the architecture, functions, methods and protocols necessary to design modern network management systems. Special emphasis is on network management standards such as Telecommunications Management Network (TMN) and Simple Network Management Protocol (SNMP.) Basic network management concepts and methods will be covered. Real-world examples will be used to illustrate concepts, protocols and methods that are fundamentals to address network management issues.

Student Learning Objectives/Outcomes

The objectives of this course include gaining solid knowledge and some hands-on experience of the telecommunication network management technology. After taking this course a student is expected to be able to explain and evaluate the architectures and functions, as well as important concepts, methods and protocols used in telecom network management systems. Paper critique and hands-on small projects will be used to further the understanding of this important telecommunication technology.

References:

"**Principles and Practice**", Mani Subramanian, Addison-Wesley, 2000, ISBN-0-201-35742-9.

Suggested Course Materials

Topics to be discussed in this course include

- Telecommunication networks review
 - Principles of telecommunication network management
 - SNMP
 - TMN
 - Fault Management
 - Configuration Management
 - Performance Management
 - Security issues
 - Telecommunication network management protocols: e.g. SNMP, CMIP, etc...
 - Web based network management
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Assignments & Academic Calendar

There will be two exams: a midterm and a final. The exams will be closed book and the final exam is comprehensive.

Homework will be assigned. Students are also required to read and critic network management technologies related papers as homework. Results of projects and paper critique may need to be presented to the class.

A small design project will be performed by teams

Grading Policy

The grade each student earns from this class will be based on the following table.

Midterm	20%	A	93 – 100
Final	40%	A-	90 – 92
Assignment	15%	B+	87 – 89
Project	<u>25%</u>	B	83 – 86
Total	100%	B-	80 – 82
		C	70 – 79
		F	Below 70.0

Grades are assigned according to the scale on the right:

Course & Instructor Policies

*There will be absolutely no makeup exams.
No late homework or assignment will be accepted!*

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

These descriptions and timelines are subject to change at the discretion of the Instructor.