

Western Illinois University
School of Computer Sciences
CS 590 Topics in Computer Sciences: Network Management Systems
Spring 2013

Instructor: Kim, Yeongkwun, Ph.D.

Course Credit: 3

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Lecture Hour: Tue/Thu 11:00 AM – 12:15 PM

Office: Stipes 447 F

Office Hours:

Tue: 10:00 AM – 11:00 AM, 2:30 PM ~ 3:30 PM

Wed: 2:00 PM – 3:00 PM

Thursday: 10:00 AM – 11:00 AM

or Email

Textbook: Network Management: Principles and Practice by Mani Subramanian
Addison Wesley

References:

- ITU-T Recommendations: www.itu.org
- ISO Recommendation: www.iso.org
- TM Forum
- 3 GPP & 3 GPP2 Recommendations

Course Objectives

Network management entails monitoring and controlling various network devices on today's networks in order to provide a more reliable, secure and efficient network environment. This course covers the basic concepts and techniques used in network management. Also, international standards such as Internet network management framework and OSI network management framework will be studied. The students will get a chance to develop a prototype network management system.

Method of Instruction: Lecture and seminar

Method of Evaluation

Homework Assignments:	30 points
2 Exams	40 points
Research project and presentation:	30 points
1 page proposal	3 points
Presentation & participation	7 points
Final report:	20 points

Letter grade :

- A: ≥ 90
- B: ≥ 80
- C: ≥ 70
- D: ≥ 60
- F: < 60

Note 1: Point ranges for letter grades will be based on a number of factors, including absolute and relative performance. Instructor reserves the right to lower the scale if performance warrants it.

Note 2: Written Homework should be clearly **TYPED** as much as possible.
Otherwise, it will not be accepted!!!

Note 3: All assignments are due at the first 5 minutes of class. Late assignments will be given 30 % penalty **BUT WILL NOT** be accepted after 24 hours of the due.

Note 4: No Make-up Exam will be given without **documented proof** of serious hardship. In case, student must be contact instructor immediately.

Note 5: One or two pop quizzes may be administered during the semester.

Note 6: The topics for the research project are **OPEN**. It can be either doing some research or Implementation of a prototype of small network management system (you can refer to textbook page 600 for the some possible topics). The page length of the documentation should be 10 pages in a single space.

▪ **1 page proposal due: February 19**

This proposal must include an overall **description of your topic**

▪ **10 pages report due: final exam schedule**

This report must include

- 1) **an introductory description of your topic,**
- 2) **your finding if applicable, and**
- 3) **concluding remark**

Note 7: Class attendance is FULLY student responsibility.

- Active class participation is expected
- You may ask a question anytime
- You are expected to attend all classes

Major Topics To Be Discussed

- Overview of Network Management
- Network management frameworks and architectures
- Internet management framework
- OSI management framework
- Web-based framework
- Web-based enterprise management
- Network monitoring

Plagiarism:

It is assumed that students will learn from each other and in many cases exchange ideas regarding projects, papers and assignments. It is also required that student complete their assignments as an individual effort. Copying retyping or taking other's work and turning it in as your own will result in a zero for the material and may further be dealt with using the University's established plagiarism policy.

Remarks:

- The contents on this syllabus can be changed with advance notification.
- **Student Rights and Responsibilities – Refer to the following WEB site**
<http://www.wiu.edu/provost/student/>