

# CNT 5106C – Computer Networks

## Spring, 2013

### Syllabus

**Please read the course web site carefully for all information about the course, including the homework and project assignments.**

Course Title: Computer Networks  
Credits: 3  
Instructor: Ye Xia  
Office: CSE E538  
Tel: 352-505-1571  
Office Hours: Thursday, 1:30 pm – 3:30 pm  
Email: [yx1@cise.ufl.edu](mailto:yx1@cise.ufl.edu)  
Course URL: [http://www.cise.ufl.edu/~yx1/teaching/CNT5106\\_F13/index.htm](http://www.cise.ufl.edu/~yx1/teaching/CNT5106_F13/index.htm)

Class Room: NEB 100  
Class Hours: Tues. Period 2, 8:30-9:20 am  
Thur. Periods 2-3, 8:30-9:20 am, 9:35-10:25 am

TA: Wang, Yi  
TA Office: E309  
Office Hours: 4-5pm, Tuesday and Thursday  
Email: [yiwan@cise.ufl.edu](mailto:yiwan@cise.ufl.edu)

TA: Qi, Shaoyu  
TA Office: E309  
Office Hours: 3-4pm, Monday and Wednesday  
Email: [shaoyu.qi@gmail.com](mailto:shaoyu.qi@gmail.com)

#### **Textbook:**

James F. Kurose and Keith W. Ross. *Computer Networking - A Top-Down Approach*, 6th edition, 2013.

#### **Objectives:**

This is an introductory course on computer networks at the graduate level. We will focus on the concepts and fundamental design principles that have contributed to the global Internet's scalability and robustness and will survey the underlying technologies --- e.g., HTTP, DNS, TCP/IP Protocols, Ethernet, and routers --- that have led to the Internet's phenomenal success.

Topics include: application to link layer protocols, congestion/flow/error control, routing, addressing, multicast, packet scheduling, switching, internetworking, network security (possibly), multimedia networks, wireless networks and networking programming interfaces. We will also cover recent development in overlay and peer-to-peer networks.

We will cover nearly all material in Kurose and Ross' book chapter 1 through 7. We may also cover chapter 8. You are also expected to complete one programming project, spread throughout the semester.

### **Prerequisites**

Basic operating system knowledge. You should be able to write simple programs in Java or C/C++. Calculus at the level of MAC 2312 and basic probability at the level of STA 2023.

### **Grading:**

Project .....	30%
Homework.....	10%
Mid-term Exam .....	30%
Second Exam .....	30%

### **Exams:**

There will be two exams; both will take place in class. They will be close-book exams.

Mid-term exam: **Feb. 28, Thursday.**

Final exam: **April 18, Thursday.**

### **Homework:**

There will be around 7 homework assignments. Students will work individually on the homework.

The due date for each assignment will be given at the time it is posted on the course web page. Homework will be collected at the start of the class on the due date. Late submissions will face 30-point reduction (out of 100), and will be accepted until one week after the original due date.

### **Project:**

There will be one project, which consists of multiple parts and multiple due dates. Students will work in teams of 2–3 persons. The due dates for the project will be given when the project assignment is posted on the course web page. Late submissions will NOT be accepted.

### **Re-grading Policy:**

Re-grading requests for the homework assignments, project, and the midterm exam will be considered only before the date of the second exam.

### **EDGE Students (off-campus only):**

Homework and Project Assignments: Please retrieve the homework and project assignments from the course web page, and submit your homework and project on the regular due dates.

Homework submissions: Please email me and cc the TAs.

Project submissions: Please write a detailed instruction on how the TAs can test your project.

You can work on the project alone. Remote collaboration may be difficult. But, if you find willing partners, that is fine as well. Please email the TAs if you look for a project partner.

Exams: Please get to know the procedure to take your exams. You should have a proctor to administer your exams. Please check with your proctor before your exam dates and make sure he/she knows how to get a copy of the exam.

Please prepare to take each exam within three days after the posted exam date for on-campus students, but as early as possible to avoid delay in getting your grade. You need to schedule the exam time with your proctor.

Please ask your proctor to scan your exam solutions and email them to me.