**CNT 4007C – Computer Network Fundamentals**  
**Fall, 2016**  
**Syllabus**

Course Title: Computer Network Fundamentals  
Credits: 4  
Instructor: Ye Xia  
Office: CSE E538  
Tel: 352-505-1571  
Office Hours: Friday, 12:00 pm – 2:00 pm  
Email: yx1 at ufl dot edu  
Course URL: [http://www.cise.ufl.edu/~yx1/teaching/CNT4007C_F16/CNT4007C_F16.html](http://www.cise.ufl.edu/~yx1/teaching/CNT4007C_F16/CNT4007C_F16.html)  
Class Room: CSE A101  
Class Hours: Tues. Period 4, 10:40-11:20 am  
Thur. Periods 4-5, 10:40-11:20 am, 11:45-12:35  

TA: Pratul Baheti  
TA Office: E312  
Office Hours: Mondays 11 am - 12; Wednesday 10 - 11 am.  
Email: pratulbaheti at ufl dot edu

**Textbook:**

**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 most of the materials in Kurose and Ross’ book chapters 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 .......... .................25%
   Homework.... .................10%
   Mid-term Exam ..........30%
   Final Exam .................35%

Exams:
There will be two exams, each two-hour long. They will be closed-book, closed-note exams. See the course web page for the dates.

Homework:
There will be 5 to 6 homework assignments. Students will work individually on the homework.
The due date for each assignment will be given at the time it is posted. Homework will be collected during the lecture 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 network programming project in Java or C/C++. Students will work in teams of 3 persons. Late submissions will NOT be accepted. See course web page for details.

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.