CNT 5106C

Fall 2019

Syllabus

Course Title: Computer Networks
Credits: 3
Class Time: Tue Period 8-9 (3pm – 4:55pm), Thu Period 9 (4:05pm – 4:55pm)
Classroom: MCCA G186
Final Exam: 12/10/2019 7:30am – 9:30am

Instructor: Shigang Chen
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Office Hours: TBA
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Course URL: http://www.cise.ufl.edu/~sgchen/cnt5106fall2016/cnt5106fall2016.html

TA: TBA
Grader: TBA

Catalog Description:
   The course covers the design, implementation and internals of modern computer networks. While all layers will be introduced, the layers below the Application Layer will be the main focus. The main effort will be spent on the design issues for Transport Layer, Network Layer, Data-Link and MAC Layer, and other related topics.

Pre-requisites:
   CEN 4500C and COP 4600. Programming skills in Java, Python, C, or C++ are required.

Course Objectives:
   There are four objectives in this course.
   - The first objective is to learn the concepts and fundamental design principles that have contributed to the global Internet's scalability and robustness.
   - The second objective is to study networking technologies, application/transport/network/data-link layer protocols, congestion/flow/error control mechanisms, routing algorithms, addressing schemes, multicasting, packet scheduling, switching, internetworking, wireless access, cryptography, network security, and network programming interfaces.
   - The third objective is to expose students to state-of-the-art research on a few selected subjects such as Internet traffic measurement and edge computing.
   - The fourth objective is to acquire basic skills for network programming.

Textbook:
Computer Networking: A Top-Down Approach Featuring the Internet, 7th Edition by James F. Kurose & Keith W. Ross, published by Addison Wesley.

Course Outline:
Computer Networks and the Internet
Application Layer
Transport Layer
Network Layer
Link Layer
Wireless and Mobile Networks
Security in Computer Networks
Special Topics

Grading:
Attendance 5%
Project 20%
Homework ... .12%
Exam 1……… 28%
Exam 2 (Final) 35%

Final Total Score (out of 100)	Letter Grade
92 or above	A
88-91	A-
85-87	B+
80-84	B
75-79	B-
70-74	C+
65-69	C
60-64	C-
56-59	D+
53-56	D
50-53	D-
Below 50	F

Exams:
There will be two exams. Each exam is two hours long. These close-book exams will count for 63% of the final grade.

The first exam will happen after the first three chapters, covering these chapters and additional content on peer-to-peer networks. The second exam will happen at the end of the semester, covering Chapters 4-8, and special topics such as Internet traffic measurement.

Homework Policy:

There will be 4 open-book assignments over the course of the semester. The due day of a homework assignment is a week after the homework is given. No late submissions will be accepted without the approval of the instructor. The assignments will not be graded; the answers will be given after due days. Each homework accounts for 3% of the final grade. You receive full points if you submit the homework by the due date.

Project Policy:

There will be one team project. Each team consists of one to two students. Students are expected to set up a demo time with the TA during a designated week for demo.

Attendance Policy:

Students are required to attend the class. Sign-on sheets will be handed out in 6 randomly selected class meetings. You will receive the full 5% attendance grade if you sign on for five out of the six. Each additional missing class costs 1%.

Honesty Policy:

All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.

Accommodation for Students with Disabilities:

Students requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.

UF Counseling Services:

Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
- University Counseling Center, 301 Peabody Hall, 392-1575, Personal and Career Counseling.
- SHCC mental Health, Student Health Care Center, 392-1171, Personal and Counseling.
- Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, sexual assault counseling.
- Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

Software Use:

All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.