DEPARTMENT OF COMPUTER SCIENCES AND SOFTWARE ENGINEERING AUBURN UNIVERSITY

COMP 4320 Introduction to Computer Networks

2020 Summer Mini-Semester II

Professor Alvin Lim

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• Virtual office hours: 12:00noon – 1:00pm, Mon/Thur (or by appointment)

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• Virtual office hours: 1:00pm – 2:00pm Mon/Wed/Fri (or by appointment)

Lecture: 8:00 – 9:30am Mon/Tue/Wed/Thu/Fri

Through zoom

Course Objectives

The objective of this course is to introduce the fundamental concepts and principles of computer communication networks, from the primary perspective of the TCP/IP protocol stack framework. The treatment will be mainly qualitative, emphasizing principles of operation and performance results rather the mathematical details of performance modeling and analysis (which is covered in advanced network courses). In order for students to gain a better grasp of the basic concepts and protocols of computer networks, students will reinforce their understanding of these basic concepts through actual network experimentation and implementations. You will gain some hands-on experience in Unix network programming through network design and implementation projects.

Pre-requisites

COMP 3500 or COMP 3510. In practice, you'll need a working knowledge of Java, C or C++ to do the programming assignments.

Required Text

Computer Networking: A Top-Down Approach, 7th Edition, by James F. Kurose and Keith W. Ross, published by Pearson Education, Inc., 2017, ISBN 9780133594140

Live Online Lectures through Zoom

The lectures for this class will be delivered live through zoom. Recordings of the live zoom lectures will be made available through the zoom cloud. Attendance in the live lecture is optional, however, students are responsible for all materials and announcements discussed in the live lectures.

Sign-in to Zoom

You can join the Zoom meeting for each lecture through the Canvas COMP 4320 Zoom webpage. An alternate way to join the lecture Zoom meeting is as follows.

You can also sign-in to Zoom in order to access your Profile and Schedule meetings. You may sign-in from either the webpage https://auburn.zoom.us, or from the Client or App on your computer or device. If prompted, choose Single Sign On (SSO) and enter "auburn" as the domain. You will then be taken to the AU AUthenticate login page where you will use your AU credentials to sign-in to Zoom. (Note: Sign-in must be completed before starting or joining a meeting in order to have full host permissions for your events.)

After you have signed in to Zoom, you can select Join a Meeting for each lecture by entering the Meeting ID and the password. The Meeting ID and the password will be emailed to every student registered in the class.

For information on Getting Started with Zoom, view https://support.zoom.us/hc/en-us/articles/201362033-Getting-Started-on-PC-and-Mac For a Zoom participant quick start guide, view http://wp.auburn.edu/biggio/zoom-participant/ For other useful information on Zoom, view http://wp.auburn.edu/biggio/zoom/

Virtual Office Hours

Virtual office hours will done through remote zoom meeting and email only. Some discussions, concerns, query and comments can be done through email alone. If students need to discuss anything verbally with me or the TA, email us first and then we will set up a zoom meeting and email you back the zoom meeting ID. The difference between virtual office hours and non-office hours is that during the virtual office hours, we will respond to you as soon as possible, but during non-office hours our responses to set up a zoom meeting may be delayed.

Online Course Information

This syllabus, lecture slides, information on zoom lecture recordings and other course materials will be posted on Canvas.

Lecture Notes

The lecture slides should not be regarded as substitutes for attending the lectures. Lectures may cover material not included in these slides. You will be responsible for all materials that are discussed in class, including those that may not be in the slides.

Grading

Your course grade will be determined according to the following.

Programming projects	30%
Homework	15%
Test 1	15%
Test 2	15%
Final Exam	25%

Letter grades will be based approximately on the following grade boundaries (eg. A = 90-100 %, B = 80-89, C = 70-79, D = 60-69, F < 60).

Tests

Tentative date for Test 1 is Tuesday July 7, 8:00 am - 9:30 am, Test 2 is Thursday July 21, 8:00 am - 9:30 am and the Final Exam is on Tuesday August 4, 8:00 am - 10:30 am. All tests will be closed book. Final exam is comprehensive.

Test Proctoring using Honorlock

All tests and the final exam will be taken by students through quizzes in Canvas with Honorlock enabled. The online testing environment should mimic the 'in class' testing environment. The requirements for taking these tests are described in the attached syllabus supplement. All students must make sure that they meet all these requirements, including all requirements for computer technology & Internet, testing area, and impermissible items and actions. Students must have all required software and hardware (for example, a working webcam and microphone) and other details as described I the syllabus supplement.

Students are expected to follow the exam administration and proctoring method described in this syllabus. Students must express any concerns regarding the proctoring method in writing to both the instructor and the department administration during the first week of

class but no later than one week prior to the first exam. The department administration will forward any unresolved student concerns to the University officials who selected the proctoring options for their consideration, but the student is still expected to take the exam as required.

Homework

There will be several homework assignments based on the topics that we discussed. The homework assignments are usually due one week after being assigned. All submission and grading will be through Canvas, except as noted. Late homework will be counted off 20% per day. All late homework must be turned in by 11:55 pm on the day of the last class lecture.

Programming Projects

Your projects will involve the design, implementation and evaluation of computer network protocols. In these projects, you will work in groups of 2 or 3 students. Programming projects will be implemented using inter-process communication facilities in Java.

All group members will receive the same score on the project unless there is obvious disparity in the responsibilities of the team members. If there are obvious disparity in the work distribution, all members of the team must sign a letter that states the percentage and type of work done by each member of the team.

Collaboration

All homework assignments must be completed by each student individually. Each group project must be developed and programmed by the members of the group only. If you have questions concerning the difference between working with other students (whether they are in this course or not) and unacceptable collaboration, please bring them to my attention. Any direct copying of someone else's work, or misrepresentation of other work as your own, will be grounds for failing the course.

Late Policy

Penalty for late work is 20 points per day late, unless an extension (for a valid reason) has been granted in advance.

The TA's Rights and Responsibilities

The TA's rights and responsibilities include grading, proctoring, some lecturing, and helping you where appropriate. *Always treat your TA with respect and professionalism*.

Accommodation Policy

Students who need special accommodation due to disability must contact me within the first two weeks of class to discuss the specifics of accommodation that you need. I'll try to provide the necessary accommodation.

Students who need accommodations must also electronically submit their approved accommodations through AU Access. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).

Academic Honesty Policy

All portions of the Auburn University student academic honesty code (Title XII) found in the Student Policy eHandbook will apply to this class. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

Note: You will be given specific guidance on homework as to where you can cooperate, and where you must do work entirely on your own. Unless otherwise specified, all work must be done on your own. All tests are individual assignments.