

IT-5423: Computer Networks and System Administration Syllabus, Fall 2019

Instructor

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Office Hours: Tues and Thurs, 11am-2pm

Contact

1. Please use your D2L email account (yourlogin@kennesaw.view.usg.edu) to contact me;
2. Use D2L Discussion Forums and D2L Chat to interact with your classmates;
3. Sensitive information (e.g., grades) can only be sent to D2L or KSU email account
4. The subject line should have course number "IT 5423"
5. I will respond to your email asap (within 48 hours), unless I am out of town having limited internet availability, when it may be delayed

Course Description

Course Overview

This foundation course will provide an overview of computer networks and system administration. Topics include network protocols, network traffic analysis, operating systems fundamentals and system management.

Course Objectives

After taking this class, students should be able to:

- Describe various components of operating systems such as file, process and memory managers.
- Install, configure, and trouble shoot various services in operating systems.
- Describe network protocols.
- Use network capture to analyze network traffics and various protocols such as TCP, ICMP, and HTTP.

Prerequisite: None

Required Textbook: None. The following book is optional.

- **Data Communications and Networking (5th Edition)**, B.A. Forouzan, McGraw-Hill, 2012, ISBN: 978-0-07-337622-6

Grading

Grading Policy

Lab (10)	45%
Quiz (3)	15%
Discussions (5)	15%
Mid-Term exam	10%
Final exam	15%
Total	100%

A: [90, 100]; B: [80, 89]; C: [70, 79]; D: [60, 69]; F: [0, 59];

- All assignments will be posted on D2L: <https://kennesaw.view.usg.edu>
- All assignments must be submitted through D2L by the deadline;
- Please double-check your submission; whatever you submit by deadline will be graded;
- No late submission will be accepted; late submission means no submission;
- We do not accommodate any makeup for quiz, midterm, and final exams;

Course Outline

Course Organization

This course will be organized as weekly units. Each week starts on **Monday** and ends on **Sunday**. All homework, quizzes, and lab assignments belonging to a particular weekly unit are due on **Sunday of that week at 11:30PM**.

On every Monday, you will be provided with the following materials:

- (1) An overview of our contents, materials, and goals for this week (**this is where you start from: all homework, quizzes, assignments will also be announced in this study guide**);
- (2) Assigned reading from textbook;
- (3) PowerPoint slides;
- (4) Homework assignments, or lab, or quiz;
- (5) A brief video lecture to walk you through the PPT slides;

During each week, you should:

- (1) Read the assigned sections of the textbook;
- (2) Digest the PowerPoint slides;
- (3) Take online quiz if assigned;
- (4) Finish homework assignments and submit it on time;

Grading and feedback timeline:

- (1) All online quiz keys will be open the day after the quiz expiration date;
- (2) Quiz keys will be explained to you based on your request;
- (3) Homework and projects will be graded within one week after the submission deadline;
- (4) You can find the feedback of homework/projects in GA's reports which are uploaded to D2L;

Course Calendar (tentative)

Week	Date	Topic	Assignment
1	Aug 19- Aug 25	Mod1: Introduction to OS	Lab1, Disc#1
2	Aug 26- Sep 1	Mod2: File management	Lab2, Disc#2,
3	Sep 2- Sept 8	Mod2: File management (cont.)	Quiz1
4	Sept 9- Sept 15	Mod3: Shell scripting	Lab3
5	Sept 16- Sept 22	Mod3: Shell scripting (cont.)	
6	Sept 23- Sept 29	Mod4: Process and memory management	Lab4, Disc#3, Quiz2
7	Sept 30- Oct 6	Mod5: System administration	Lab5, Mid-Term
8	Oct 7 – Oct 13	Mod6: Introduction to Networking	Lab6, Disc#4
9	Oct 14 – Oct 20	Mod7: Application layer, wireshark	Lab7, Quiz3
10	Oct 21 – Oct 27	Mod8: Packet analysis- TCP/IP/ICMP	Lab8
11	Oct 28 – Nov 3	Mod8: TCP/IP layer, TCP/ICMP/DNS packet sniffing	Lab8
12	Nov 4– Nov 10	Mod9: Mininet, virtual network	Lab9
13	Nov 11 – Nov 17	Mod10: Network management, Routing	Lab10
14	Nov 18 – Nov 24	Mod10: Network management, Routing	Disc#5
15	Nov 25 –Dec 1	Fall Break	
16	Dec 2- Dec 8	Review	Final exam

Important Dates:

Aug 19: First day of class

Sept 3: Labor holiday

October 9: Last day to withdraw without academic penalty

November 25-Dec 1: Fall break

Dec 9: Last day of class

Tips for Effective Online Learning

For an online class, students can really enjoy the benefits of learning at your own pace and in whatever environment that you choose. Below are some tips for effective online learning:

Check the GaVIEW D2L course website regularly. Always be aware of the current status of the course. It might be helpful to subscribe to the RSS feeds within the News Tool, sign up for text message alerts, or subscribe to your posts within the Discussion Tool. By taking advantage of the tools within the environment and the posted learning material, you can maintain an enhanced learning experience.

Work closely with your instructor. If you have any questions, please contact me immediately. The best way to contact me is via email.

Begin your work early. If you can start a task early, don't start late. Assuming you spend the same amount of time completing the task, starting later will be much more stressful than starting early.

Never wait until the last minute to begin an assignment! You'll have no turnaround time if you need help or something happens.

What is Plagiarism?

Plagiarism is defined as the practice of taking someone else's work or ideas and passing them off as one's own. If you are unaware or uncertain on how to properly cite a particular source, please do not neglect to add the citation—that is considered plagiarism. Cooperation and exchange of ideas with other students are encouraged; however, you are responsible for your own work. It is **OK** to talk with someone about ways to approach an assignment or discussing a particular problem that you are having. It is **NOT OK** to take someone else's assignment and modifying it, or examining someone's solution in detail.

If you have questions on how to cite your work, please contact me immediately! For more information, please refer to the "Plagiarism Policy" under the *Policies* section of this syllabus.

Home and Lab Assignments and Discussions

All Assignments will be posted on D2L <https://kennesaw.view.usg.edu/> Weekly reports are due at 11:30 pm on Sunday. If for some reason you have not been able to submit assignment by deadline (due to unavoidable circumstance such as downtime of D2L website system, power failure, etc.), then you have 24 hours to submit your work with no penalty (quizzes cannot be submitted later). No reports will be accepted after that.

Attendance Policy

There is no attendance, but students are required to access to D2L course each week to confirm their attendance. If you fail to log into at least one during a week, or fail to complete course activities within a two-week period at any time during the semester, the instructor will consider your lack of activity as an indication of your intention not to continue in the course. Failure to participate without officially withdrawing from the course will result in a grade of F. Be sure to submit all assigned work on time. If you are not able to participate in assigned activities online, contact your instructor immediately.

Email Communication and Announcements

To communicate with you through e-mail I will use D2L e-mail and I will try my best to answer your email in 24-48 hours (exception when I am out of town for attending conference). You must periodically check news section of D2L course web page, D2L account, and KSU e-mail account for messages to insure that messages can be received timely. Be sure that your mailbox is not full. Any changes of dates and announcements will be publicized on news notice board and/or email.

Instructor turn-around time on student submitted materials/assessments:

You submitted materials will be evaluated within 2-3 days of submission. In most cases, you will know your grade immediately upon completion of an assessment item such as quiz. I will post

your grade for specific items in D2L gradebook and notify you on noticeboard message for you to look and address any error/correction in a timely manner. Please check noticeboard frequently for announcement.

Cumulative class grade reporting:

Your up-to-date grade on all evaluated items will be available in D2L gradebook. By mid-term, you should be able to identify how much you received on at least 45% of course mark (from submitted labs/ HW/quiz).

Board of Regents/USG - Web Accessibility Policy

- Web Accessibility http://www.usg.edu/siteinfo/accessibility_tutorial/the_law
- Reasonable Accommodations http://www.usg.edu/siteinfo/accessibility_tutorial/the_law

COURSE WITHDRAWAL

Please refer to the KSU Catalog <http://www.kennesaw.edu/registrar/policies/withdrawl.php>

ACADEMIC INTEGRITY

Every KSU student is responsible for upholding all provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. The Code of Conduct includes the following:

- Section II of the Student Code of Conduct addresses the University's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation/falsification of University records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the University Judiciary Program, which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement.
- Students involved in off-campus activities shall not act in a disorderly or disruptive fashion, nor shall they conduct any dangerous activity.
- Students involved in off-campus activities shall not take, damage or destroy or attempt to take, damage or destroy property of another.

Reasonable Accommodations

Students with qualifying disabilities under the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act who require "reasonable accommodation(s)" to complete the course may request

those from Office of Student Disability Services. Students requiring such accommodations are required to work with the University's Office of Student Disability Services not individual faculty members or academic departments. A student anticipating a need for accommodation, must submit documentation requesting an accommodation in a timely fashion to permit time for a determination prior to submitting assignments or taking course quizzes or exams. Students may not request retroactive accommodation. Students should contact the office as soon as possible in the term for which they are seeking accommodations. Student Disability Services is located in the Carmichael Student Center in Suite 267. For more information, please call 470-578-2666 or visit the Student Disabilities Services websites at www.kennesaw.edu/stu_dev/sds

http://www.kennesaw.edu/stu_dev/dsss/dsss.html

Student Privacy (FERPA)

Students have certain rights to privacy. <http://registrar.kennesaw.edu/resources/ferpa.php>

The University's online learning system and email system are designed to prevent unauthorized individuals from gaining access to sensitive information or information protected by federal or state law. We will communicate regarding course matters through the University's designated technology learning system or Kennesaw state email system.

KSU Sexual Misconduct Policy & Ethics Statement

KSU will not tolerate sexual misconduct or sexually exploitative or harassing behavior of any kind. <https://policy.kennesaw.edu/content/sexual-misconduct-policy>.

You are expected to respect religious, cultural, and gender differences.

Netiquette: Communication Courtesy

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. Inappropriate communication will not be tolerated and will be reported to the Chair and Dean. It may result in dismissal from the course.

KSU STUDENT RESOURCES

For issues with technical difficulties, please contact the **Student Helpdesk**:

- Email: studenthelpdesk@kennesaw.edu
- Call: 470-578-3555

*** Additional Technology Resources**

- [Student Service Desk and Help Center](#)
- [Browser Checker](#)
- [USG Desire2Learn Help Center](#)

- [ITS Documentation Center](#)
- [Check Service Outages](#)
- [Maintenance Schedule](#)

* Academic Resources

- [Academic Tutoring Services](#)
- [Disability Resources](#)
- [ESL Study and Tutorial Center](#)
- [Library](#)
- [The Writing Center](#)

* Student Support and Wellness Resources

- [Career Services Center](#)
- [Counseling and Psychological Services](#)
- [Center for Health, Promotion and Wellness](#)
- [Student Health Clinic](#)

Grade Appeals and Student Complaints

KSU desires to resolve student grievances, complaints and concerns in an expeditious, fair and amicable manner. For complaints regarding this course, please contact the professor. If the issue is not resolved, contact the department chair.