Syllabus



CS 35201 001/002 Fall 2022

Computer Communication Networks

M & W, 02:15 pm - 03:30 pm , MSB-00228

Instructor: Betis Baheri

Email: bbaheri@kent.edu Please start with "CS35201" in the subject line

Website: https://web.cs.kent.edu/~bbaheri/

http://media.kent.edu/~bbaheri/

Office Days & Hours: M & W 1:00 pm - 2:00 pm

Office Location: MSB - LAB 160

Course Learning Objectives: Students will learn

- How the Internet is organized, operated and managed.
- How local area networks, wireless networks, and mobile networks are integrated into the Internet.
- How digital data moves from one computer to another.

Prerequisite: CS 23001 Computer Science II: Data Structures & Abstraction *Minimum grade of C (2.000) in CS 23001*

Text Book: Kurose, J. F., &; Ross, K. W. (2017). Computer networking: A top-down approach. Pearson.

Computer Networks, 5/E Andrew S. Tanenbaum, Vrije University, Amsterdam, the Netherlands David J. Wetherall, University of Washington

Course website: www.cs.kent.edu/~bbaheri/CS35201

Course Description: An introduction to net-centric systems, data communication protocols, network architectures, routing protocols, network management, congestion control, network security, compression techniques, mobile and wireless networks, and WWW as an example of a client-server system.

Course Instruction: Instructions of the course involve lectures given by the instructor on the subject material from course resources. Class attendance is mandatory, and student participation is strongly encouraged to facilitate the learning process.

References: Computer Networks: A Systems Approach. Bruce S. Davie and Larry L. Peterson. Some external resources will be provided in each lecture.

Evaluation:

Student evaluation and learning assessments involve:

 $\begin{array}{lll} \text{First Exam} & 20\% \\ \text{Second Exam} & 20\% \\ \text{Final Exam} & 20\% \\ \text{Labs} & 10\% \\ \text{Homeworks} & 30\% \end{array}$

Final Exam Date: Dec. 15 2022 12:45 pm - 3:00 pm

Final Exam Schedule: https://www.kent.edu/registrar/fall-final-exam-schedule

Fall Important Dates: https://www.kent.edu/registrar/fall-important-dates

Credit Hours: 3

Grading Policy [x - y]:

A	A-	B+	В	B-	C+	С	C-	D+	D	F
93-1	00 90-9	3 87-90	83-87	80-83	77-80	73-77	70-73	67-70	60-67	< 59

Class Attendance:

- Policies regarding class attendance and absence are articulated in the Administrative policy regarding class attendance and class absence.
- Historical data has shown a strong correlation between good grades and attendance.
- Solutions to some specific problems and discussions may not be readily available in the text and the web. It is important to attend and take notes.
- While attending, please mute/silent/vibrate your cell phone and electronic devices.

Registration: University policy requires all students to be officially registered in each class they are attending. Students who are not officially registered for a course by published deadlines should not be attending classes and will not receive credit or a grade for the course. Each student must confirm enrollment by checking his/her class schedule (using Student Tools in FlashLine) before the deadline indicated. Registration errors must be corrected before the deadline. Please visit University Registrar for Calendars & Deadlines.

Students with Disabilities: University policy requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note that you

must first verify your eligibility for these through Student Accessibility Services or contact (330) 672-3391.

Administrative Policy Regarding Students Conduct:

Chapter 3 of the University Policy Register describes policies with regard to teaching, research and public service. In specific, please review the following policies before the first assignments:

- Section 3-01-2: Administrative policy regarding class attendance and class absence
- Section 3-01-4: Administrative policy and procedures regarding final examinations
- Section 3-01-8: Administrative policy regarding student cheating and plagiarism

The sanctions described in Section 3-01-8 will be used to deal with any academic dishonesty or misconduct.

COVID-19 Update: Kent State University COVID-19 Plans

Tentative Course Outline:

The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the reading assignments.

Week	Content				
Week 1	Course Overview and OrganizationAn Introduction to Computer Communication Networks				
Week 2	• An Introduction to Computer Communication Networks				
Week 3 & 4	Physical Layer				
Week 5	• Review • Review Questions and Exercises (Chapter 1 & 2)				
Week 6 & 7	 Data Link Layer Reading assignment: Something interesting 				
Week 8 & 9	• Media Access Control				
Week 10	 Review Review Questions and Exercises (Chapter 3 & 4) 				
Week 11 & 12	Network Layer				
Week 13 & 14	• Transport Layer				
Week 15	 Socket Programming Review Questions and Exercises (Chapter 5 & 6) 				