Syllabus

CMP-405 & CMP 743: Introduction To Networks Lehman College, City University of New York Fall 2021

Course Information

Semester	Class Section	Class Hours	Room Number	
Fall 2021	H81	T & TH 7:50 pm - 9:30 pm	Online-Synchronous using Zoom and sometimes on campus in Gillet Hall, Room 024. Check the schedule below	

Instructor Information

Instructor	Email	Office Number	Office Hours
Steven Fulakeza	steven.fulakeza@lehman.cuny.edu	GI-232 and online	<u>T & TH 3:00-5:00 PM</u>

Lecture & Office Hours Location:

https://zoom.us/j/99709812033?pwd=VIV5SGNpQXhxMTRiek8ycXF6aGp0Zz09

CMP 405 Description: 4 hours, 3 credits

4 hours, 3 credits. Introduction to network protocols and algorithms. Intensive study of the most important protocols at each layer. Examination of their strengths and weaknesses. Basic algorithms for identifying primary servers, constructing forwarding and broadcasting trees, and determining routing tables. Writing a simple networking service at the I.P. layer or higher. Lab exercises include building and testing small networks. PREREQ: CMP 334 and CMP 338.

CMP 743 Description: 4 hours, 4 credits

Digital and analog communication, system architectures, and connection-oriented and connectionless service. The OSI model as a conceptual framework, and actual communication models and their protocols. Selected contemporary topics, such as communications security and the World Wide Web. PREREQ: A course in operating systems.

Course Objectives

At the end of the course, students should be able to:

- 1. Define and use basic concepts and terminologies for networking.
- 2. Describe the layers of the TCP/IP reference model and their purposes.
- 3. Work with classful and classless internet addressing.
- 4. Explain the Address Resolution Protocol.
- 5. Identify the elements of segments, datagrams and Ethernet frames.
- 6. Explain datagram fragmentation.
- 7. Understand internet routing and routing protocols.
- 8. Explain how routing protocols such as BGP, RIP, and OSPF work.
- 9. Explain UDP, TCP and ICMP.
- 10. Understand sliding window protocols.

Textbook: (Either one of the following)

Internetworking With TCP/IP, Principles, Protocols, and Architecture, (Sixth Edition) by Douglas E. Comer. (ISBN-13: 978-0-13-608530-0, ISBN-10: 0-13-608530-X).

OR

Internetworking With TCP/IP, Principles, Protocols, and Architecture, (Fifth Edition) by Douglas E. Comer. (ISBN-13: 978-0-13-187671-2, ISBN-10: 0-13-187671-6).

Grading Policy

The grading for the course will be based on:

Homework: 40%Midterm Exam: 30%Final Exam: 30%

Please note that there are no make-up exams.

Note: Missed final exam = Unofficial Withdraw (WU). WU counts as an F in calculating your GPA and has implications for financial aid.

Exam Schedule

Midterm Exam: October 20, 2021Final Exam: December 16, 2021

Homework: Homework is due most weeks. Homework assignments are posted on the class website and Blackboard, they reinforce concepts covered in class. Extra credit will be available for the homework.

The homework will be submitted on Blackboard. All homework assignments must be typed and submitted as Microsoft Word documents files. No other forms of submission will be accepted.

No late homework will be accepted.

Expectations: Students are expected to learn both the material covered in class and the material in the textbook and other assigned reading. Completing homework is an essential part of the learning experience. Students should review topics from prior courses as needed using old notes and books.

Honor Code: You are encouraged to work together on the overall design of the homework. However, for specific homework assignments, all work must be your own. You are responsible for knowing and following Lehman's <u>academic integrity code</u>.

All incidents of cheating will be reported to the Vice President of Student Affairs.

Email and Blackboard: I will be using a Blackboard site for much of the class activities. Blackboard can be accessed through the Lehman website at www.lehman.cuny.edu. You will also need to have access to your Blackboard account. You can contact the IT Center if you have any problems accessing your account.

I will be communicating with you on a regular basis throughout the semester using your **email address on Blackboard**. You must verify that Blackboard has your **Lehman College email address**. You must check that email address on a regular basis. **There will be no acceptable excuse for missing an email announcement**.

Accommodating Disabilities: Lehman College is committed to providing access to all programs and curricula to all students. Students with disabilities who may need classroom

accommodations are encouraged to register with the Office of Student Disability Services. For more info, please contact the Office of Student Disability Services, Shuster Hall, Room 238. http://www.lehman.edu/student-disability-services Telephone: 718-960-8441 Email: disability.services@lehman.cuny.edu.

Recording of Remote Classes: Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.

All classes that are conducted online will be recorded. The link for the recordings will be made available in Blackboard. Classes done in person will not be recorded.