Boston University **Fall 2023**
Department of Electrical and Computer Engineering

Introduction to Computer Networking (EC 441)

General Information

Time & Location: Tue & Thu 9AM—10:50 AM, PHO 211

Instructor: Professor Avi Mohan (avimohan@bu.edu)

Office hours: PHO 405(A), Tue & Thu 1:30 PM—2:30 PM or by appointment.

Graduate Teaching Assistant: Ayesha Naeem (nayesha@bu.edu)
Undergraduate Course Support: Andres Francis Garcia (andresfg@bu.edu)

TA and GTA Office hours:
Thursday and Friday 6:00 PM – 7:30 PM (PHO 305)

Course Web Site Blackboard Learn: https://learn.bu.edu

Required Textbook:
J. Kurose and K. Ross, *Computer Networking: A Top-Down Approach (**8th edition**)*, Pearson, 2021.
ISBN-13: 9780135928615
Textbook web site: https://gaia.cs.umass.edu/kurose_ross/index.php

Prerequisites:
1. EC 381 (ECE Probability)
   a. For a refresher on Probability and Random Processes, please refer to the lecture notes for ENG EK 381 by Prof. Bobak Nazer.
   Link: https://bobaknazer.github.io/probstatdata/lecturenotes
   b. Additionally, Prof. Nazer has a list of lectures on YouTube.
   Link:
   https://www.youtube.com/playlist?list=PLBV8cFFHvjMrrpoaRzHqu3dkCNZAiWMu2

Familiarity with programming (MATLAB, Python, etc.) and basic knowledge of Linux recommended.

Grading:
- Class attendance and participation (10%)
- Homework (30%): there will be three problem sets.

- One mid-term and a final exam (30% each):

Collaborating with anyone on exams is strictly prohibited.

Grading Policies:

1. Late assignment submissions will not be accepted.
2. It is forbidden to use any human resource or large language model outside of class (including web-based help services, outside tutors, ChatGPT, Google Bard etc.) in doing your homework.
3. Collaboration in solving homework assignments is acceptable. However:
    a. Names of collaborator(s) must be provided at the top of the submission.
    b. Each student must provide detailed explanations of his/her solutions expressed in his/her own words. Students must be able to explain their solutions to the instructor, if requested.
    c. Copying solutions from other students or other sources is strictly unacceptable. Plagiarized solutions will be heavily sanctioned.

Grading Scale:

The final grade, denoted by G, will be a number between 0 and 100. This number will be converted into a letter grade using the following scale:

Numerical Grade	**Letter Grade**
G >= 90	A
85 <= G < 90	A-
80 <= G < 85	B+
75 <= G < 80	B
70 <= G < 75	B-
65 <= G < 70	C+
60 <= G < 65	C
55 <= G < 60	C-
50 <= G < 55	D
G < 50	F

Laboratories and Homework:

1. Written homework will cover topics such as network traffic analysis, network simulation, socket programming, TCP/IP, Internet routing, and software-defined networking.
2. The laboratory location is in the Photonics Center, Room 305.
3. To get card access to the lab, please apply on-line https://www.bu.edu/dbin/eng/zaius
4. Students are strongly encouraged to use laboratory sessions to familiarize themselves with Wireshark.

Submitting Assignments:

1. All homework should be submitted via Blackboard as a **pdf file** (no zip file please!).
2. Students are encouraged to type their assignments. Scanned answers will be accepted only if they are of sufficiently high quality.
3. After uploading an assignment on Blackboard, please remember to submit the assignment. Otherwise, your assignment will not be available to the grader.
4. The due date will typically be on Fridays in the afternoon.

Academic Misconduct:
BU takes academic integrity very seriously. Academic misconduct is conduct by which a student misrepresents his or her academic accomplishments or impedes other students' opportunities of being judged fairly for their academic work. Knowingly allowing others to represent your work as their own is as serious an offense as submitting another's work as your own. More information on BU's Academic Conduct Code, with examples, can be found at https://www.bu.edu/academics/policies/academic-conduct-code/

Computing Ethics:
BU lab and computing facilities must be used responsibly; misuse by even a few individuals has the potential to disrupt University business or the work of others. You are therefore required to exercise responsible, ethical behavior when using the University's computing facilities.
More information on BU's policy on computing ethics, with examples, can be found at https://www.bu.edu/dos/policies/lifebook/computing-ethics/

Classroom Conduct:

- Attend class regularly and on time. If arriving late, use the back door of the classroom.
- Actively participate. If some materials require clarification or writing on blackboard is difficult to read, raise your hand.
- Use your laptop only to take notes or participate in class activities. Do not text or surf the Internet during class (students may be requested to move to a back row if this happens).