

COURSE OUTLINE

EE 444 INTRODUCTION TO COMPUTER NETWORKS 2020-21 Spring Term

Instructors:

Ece Güran Schmidt e-mail: eguran@metu.edu.tr

Teaching assistant:

Fatih Yazıcı e-mail: yazicif@metu.edu.tr

Schedule and Course Conduct:

Asynchronous video lectures

Synchronous Q & A group sessions, Quizzes

Monday: 12:40 to 13:30, Wednesday: 9:40-1130

Topics:

Introduction to computer networking; layered architectures; Elementary queuing theory, M/M/1 queues; Network applications; Transport protocols and their performance, Internet Protocol: switching and routing, internetworking; Data link protocols and their performance; Error detection and correction; Medium access control protocols and their performance.

Pre-requisite: EE230

Background Requirement(s): *This is strictly a computer course!!!* One of EE441, EE445 or EE447 is strongly recommended.

Textbooks and Reference Material:

James F. Kurose, Keith W. Ross, Computer Networking, 7/e, Addison Wesley, 2017.

A.J. Tanenbaum, Computer Networks, Ed.5, Prentice-Hall, 2011.

Grading:

- Quizzes: 40%
- Final exam: 40%
- Programming assignments: 20%
- Possible Bonus Assignments and Readings (will be announced later)
- Students who miss all the quizzes or do not submit at least 1 programming assignment will be graded as NA ("Not Available").

Policy:

We will have proctored synchronous examinations (Quizzes and Final). The examinations will be conducted according to the METU Department of Electrical and Electronics Engineering Principles of Online Exam with Audiovisual Equipment.

Quizzes will be on Monday (the dates are published below). Content of the quiz coverage will be from the class lectures and homework assignments-demos. If you have a course clash make sure that your Mondays are free. All synchronous lectures will be recorded and published afterwards.

No mandatory attendance is required.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
14.03	15.03. Synchronous Lecture: Policies, Introduction	16.03.	17.03. Synchronous Lecture: Introduction ctd	18.03.	19.03.	20.03.
21.03 Queuing video 1	22.03.	23.03.	24.03. Synchronous Lecture: Introduction ctd	25.03.	26.03.	27.03.
28.03. Queing video 2	29.03.	30.03.	31.03. Synchronous Lecture: Queing	01.04.	02.04.	03.04.
04.04. Application Layer video 1	05.04. QUIZ Queuing	06.04.	07.04. Synchronous Lecture: Q&A	08.04.	09.04.	10.04.
11.04. Application Layer video 2	12.04.	13.04.	14.04. Synchronous Lecture: Application Layer	15.04.	16.04.	17.04.
18.04. Transport Layer video 1 Techniques of Reliable Transmission video 1	19.04. QUIZ Application Layer	20.04.	21.04. Synchronous Lecture: Reliable Transmission	22.04.	23.04. National Holiday	24.04.
25.04. Techniques of Reliable Transmission video 2	26.04.	27.04.	28.04. Synchronous Lecture: Transport Layer	29.04.	30.04.	01.05.
02.05. Transport Layer video 2	03.05. QUIZ Reliable Transmission	04.05.	05.05. Synchronous Lecture: Q&A Transport Layer	06.05.	07.05.	08.05.
09.05. Network Layer video 1	10.05.	11.05.	12.05.	13.05. Religious Holiday	14.05. Religious Holiday	15.05. Religious Holiday
16.05. Network Layer video 2	17.05. QUIZ Transport Layer	18.05.	19.05. National Holiday	20.05. S.L Network Layer 17:40	21.05.	22.05.
23.05. Link Layer video 1	24.05. QUIZ Network Layer	25.05.	26.05. Synchronous Lecture: Q&A	27.05.	28.05.	29.05. Wireshark HW due
30.05. Link Layer video 2	31.05.	01.06.	02.06. Synchronous Lecture: Data Link Layer	03.06.	04.06.	05.06.
06.06. Link Layer video 3	07.06. QUIZ Link Layer	08.06.	09.06. Synchronous Lecture: Data Link Layer and	10.06.	11.06.	12.06.
13.06. Link Layer video 4	14.06.	15.06.	16.06. Synchronous Lecture: Conclusion: Putting it all together	17.06.	18.06.	19.06. Socket Programming HW due