İSTANBUL TEKNİK ÜNİVERSİTESİ
Fen Edebiyat Fakültesi - Fizik Mühendisliği Bölümü
(https://www.fizik.itu.edu.tr/turhan/digital/)

FIZ 424E Digital Electronics CRN 10436
2020-2021 Fall

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Lecture : *Monday 12:30 – 14:30 (FEB B4 Z02)*
Laboratory : *Monday 14:30 – 16:30 (FEB Microprocessors Lab.)*
Office Hours : *Monday 15:30 – 16:30*
Textbook:

Digital Electronics, a practical approach

Principles of Modern Digital Design, Parag K.Lala, A John Wiley & Sons Inc. Publication (2007)

Fundamentals of Digital Electronics, Professor Barry Paton Dalhousie University (1998)

Digital Design 2nd Edition

Course Outline

Week		Topic
1	19 October2020	Introduction to Digital Electronics
2	26 October2020	Number Systems
3	2 November 2020	Logical Gates
4	9 November 2020	Boolean Algebra and Reduction Techniques
5	16 November 2020	Arithmetic Operations and Circuits
6	23 November 2020	Timing Signals
7	30 November 2020	Code Converter, Multiplexers, and De-multiplexers
8	7 December 2020	Code Converter, Multiplexers, and De-multiplexers
9	14 December 2020	Midterm
10	21 December 2020	Digital Design
11	28 December 2020	Counter Circuits
12	4 January 2021	Shift Registers
13	11 January 2021	Analog to Digital Converters
14	18 January 2021	Digital to Analog Converters

Quizzes:
Assignments:
Laboratory:

Dates
Midterm : December 14, 2020
Final Exam : January 25 –February 7, 2021 (Exact date and time will be announced by the Student Administration Office.)

Grading:
Oral Exam : 20% (November 16, November 30, January 11)
Midterms : 40% (December 14, 2020)
Final Exam : 40%
In order to take the final exam, you have to take at least a total 15.0 points over 60.0 from the midterm and oral e exam.

Academic Integrity

Students who cheat during an exam or on laboratory session will receive a grade of FF in the course.