

T.C.

ISTANBUL TEKNİK ÜNİVERSİTESİ
FEN EDEBİYAT FAKÜLTESİ
FİZİK MÜHENDİSLİĞİ BÖLÜMÜ
MASLAK 34469 İSTANBUL



FIZ 233E - 2022/2023 Fall

TEXTBOOK:

Microelectronic Circuits, A.S. Sedra, K.C. Smith, 5th ed., Oxford Uni. Press, (2004). Electronic Devices and Circuit Theory, R.L. Boylestad, L. Nashelsky, 10th ed., Pearson Int. Ed., (2009). Integrated Electronics Analog Digital Circuits, Jacob Millman and D. Halkias, McGraw Hill

| Week | Date | Topics |
|------|-------------|------------------------------------------------------------------|
| 1 | 20 Sep 2022 | Introduction to Electronic Circuit Elements |
| 2 | 27 Sep 2022 | Energy Levels and Energy Bands |
| 3 | 04 Oct 2022 | Semiconductors and Conduction in Semiconductors |
| 4 | 11 Oct 2022 | Semiconductor–diode |
| 5 | 18 Oct 2022 | Applications of Semiconductor-diodes |
| 6 | 25 Oct 2022 | Applications of Semiconductor-diodes and Special Types of Diodes |
| 7 | 01 Nov 2022 | Transistors (BJT) |
| 8 | | |
| 9 | 15 Nov 2022 | Transistor (BJT) Biasing |
| 10 | 22 Nov 2022 | Applications of Transistors (BJT) |
| 11 | 29 Nov 2022 | Field Effect Transistors (FET) |
| 12 | 06 Dec 2022 | Field Effect Transistor (FET) Biasing |
| 13 | 13 Dec 2022 | Applications of Field Effect Transistors (FET) |
| 14 | 20 Dec 2022 | Operational Amplifiers |
| 15 | 27 Dec 2022 | Applications of Operational Amplifiers |

^{*} Fall break

Exams

Midterm : 23 Nov 2022, 10:30-11:30.

Final Exam : (02 – 15 Jan 2023) Exact date and time will be announced by the Student Administration Office.

Quizzes

10 quizzes

Assessment of the Grades

Midterm : 30 %

Quizzes : 30 % (10 Quizzes x 3 %)

Final exam : 40 %

Attention

Students failing to score at least 25 % (i.e. 15 out of 60) on the in-term assessments (midterm and quizzes) will not be allowed to attend the final exam and will be graded **VF**.

Please keep track of the web page of Ninova, not to miss any announcements.