TENTATIVE COURSE SYLLABUS

EHB 211E: BASICS OF ELECTRICAL CIRCUITS Fall 2020

Lecture Time: Monday, 08:30-11:30

Instructor: Asst. Prof. Onur Kurt, **Office:** 3113

Email: onurkurt@itu.edu.tr, **Office Hours:** Monday, 13:30-14:30 (By appointment, Zoom)

Teaching Assistant: Mirhan Ürkmez, Email: urkmezmirhan@gmail.com

Recommended Textbooks & Notes:

- *Fundamentals of Electrical Circuits* by C.K. Alexander, M.N.O. Sadiku
- *Linear and Nonlinear Circuits* by L.O. Chua, C.A. Desoer, E.S. Kuh
- *EDT Ders Notları* by Müştak E. Yalçın: https://web.itu.edu.tr/yalcinmust/ehb211.html

Grading:

Exam I:	25%
Exam II:	25%
Homework:	20% (6 HWs in total)
Final Exam:	30% (Departmental Cumulative Final Exam)

Homework: There will be six homework assignments throughout the semester. Homework assignments are due a week after they are posted (before class time), and each homework assignment is to be submitted to the course teaching assistant (TA) before its due date.

VF Rule: Your total grade from the first two exams and the homework assignments must add up at least 40% of the class average of Exam I, Exam II and Homework Assignments combined. Otherwise, you will not be permitted to take the final examination.

Course Schedule:

Week 1 (Oct 19): Introduction and Fundamental Concepts
Week 2 (Oct 26): Basic Laws-HW1
Week 3 (Nov 2): Methods of Analysis-HW2 and HW1 due
Week 4 (Nov 9): Circuit Theorems-HW2 due
Week 5 (Nov 16): Problem Session
Week 6 (Nov 23): Exam I
Week 7 (Nov 30): Operational Amplifiers-HW3
Week 8 (Dec 7): Capacitors and Inductors-HW4 and HW3 due
Week 9 (Dec 14): First-Order Circuits-HW5 and HW4 due
Week 10 (Dec 21): Second-Order Circuits-HW5 due
Week 11 (Dec 28): Problem Session
Week 12 (Jan 4): Exam II
Week 13 (Jan 11): State-Space Representation and Linearization-HW6
Week 14 (Jan 18): Graph Theory-HW6 due