EE 3310L · Electronic Devices and Circuits Laboratory · Spring 2023

TA: Celeste Hicks Section 01: 10:10 - 12:00 pm F Russ 203 Email: hicks.158@wright.edu Section 02: 11:00 - 12:50 pm R Russ 203

Laboratory Course Description: The EE 3310L/5310L *Electronic Devices and Circuits Laboratory* provides hands-on experience with electronic circuits and measurements. The lab exercises will be performed by teams of two students and grades for the lab reports will be assigned individually. Teams are assigned by the instructor.

Attendance: Attendance at each lab session is mandatory and you must attend the section for which you are registered. Make-up labs are not given and a grade of zero is entered for non-attendance for any reason; exceptions may be made at the sole discretion of the TA.

Laboratory Exercises/Reports: Labs will be posted to the course Pilot page on a weekly basis. The format for the submitted lab report will vary from week to week, depending on the nature of the lab experiment. For most lab exercises, the lab report will consist of recorded data, answers to specific questions related to the lab, and a discussion of results. All lab reports are to be turned in electronically to the TA the following week prior to the start of lab via the corresponding dropbox on Pilot. All reports are due at the beginning of the next scheduled lab session. Late submissions will not be accepted and will result in zero points for the lab, yet still must be completed in order to receive a final lab grade. Letter grades will follow the standard University grading scale (90-100% = A, 80-89% = B, etc.).

Academic Integrity: The course instructor and the laboratory instructor fully endorse the Wright State University policy to uphold and support standards of personal honesty and integrity for all students, consistent with the goals of a community of scholars and students seeking knowledge and truth; please visit https://www.wright.edu/student-affairs/community-standards-and-student-conduct. Although laboratory exercises (equipment setup, measurements, data collection, etc.) are a collaborative effort between team members, they are not meant to be group exercises among teams; data and results are not to be shared. References (books/internet resources) that were used in preparing the report, if applicable, must be clearly cited. Compliance with the WSU academic integrity policies is an individual student responsibility. If you have any questions whatsoever, please ask your laboratory instructor for additional/clarifying guidance.

Please note that all class policies, procedures, and schedules may be adjusted by the instructor at any time.

WEEK	DATE	LAB
1	1/9-1/13	Lab 1: Diodes and Clipping Circuit
2	1/16-1/20	Lab 2: Optocoupler with Phototransistor Output
3	1/23-1/27	Lab 3: Linear Power Supply with Zener Regulation
4	1/30-2/3	Lab 4: BJT Voltages and Currents
5	2/6-2/10	Lab 5: Common-Emitter NPN Voltage Amplifier
6	2/13-2/17	Lab 6: NPN Cascode Amplifier
7	2/20-2/24	Lab 7: Common-Source N-Channel MOSFET Voltage Amplifier
8	2/27-3/3	No Lab – Spring Break
9	3/6-3/10	Lab 8: CMOS Differential Amplifier (Part One)
10	3/13 - 3/17	Lab 8: CMOS Differential Amplifier (Part Two)
11	3/20-3/24	Lab 9: Soldering
12	3/27-3/31	No Lab
13	4/3-4/7	Lab 10: Small-Signal Amplifier Design and Testing
14	4/10-4/14	Lab 11: Instrumentation Preamplifier
15	4/17-4/21	Lab 12: Sallen-Key Active Low-Pass Filter