



This document contains the instructions related to Electronics II course for 2018-2019 fall semester of Electrical and Electronics Engineering curricula.

Rules of laboratory practice:

1. Students are to complete at least 5 of total 6 different experimental procedures in a successful manner to pass the laboratory,
2. Minimum 80% of attendance required to pass the laboratory,
3. Attending to the experiments is not a sufficient measure to be successful, laboratory instructor(s) must evaluate whether student is to pass or fail,
4. In the end of the term, there will be make up laboratory hours to pass the Electronics II Laboratory,
5. Students can be evaluated in every possible manner that they adopt during the laboratory hour,
6. Student must prepare a comprehensive, clearly readable and hand-written *preliminary work* prior to each laboratory hour individually,
7. Student must prepare a comprehensive and clearly readable and hand-written *end-of-lab report* for each successful laboratory hour,
8. *Preliminary* and *end-of-lab report* are going to be evaluated as *pass* or *fail* for each student,

Preliminary works and End-of-lab reports:

9. Every student must carry an individual laboratory binder including student's notes, laboratory sheets, submitted preliminary-works and end-of-lab reports and last-term files if exists. The reason behind this request is to maintain a cumulative advantage for each student and keep comprehensive log,
10. Whenever an instructor asks about the binder that keeps the student log, student show every file in detail, and that will be evaluate the student as well,
11. Laboratory sheets include a section called *Preliminary Work*. This section, as mentioned above must be studied and documented prior the laboratory hour,

Groups, entrance and exit hours:

12. Each laboratory sheet includes one *Experimental Procedure*. Each *Experimental Procedure* must be carried out by the group that is formed by four students at most,
13. The student pairs of groups are going to be determined by students themselves on the week prior to the first laboratory hour,
14. An empty sheet of the groups is going to be put on the students notice board at the entrance floor so that students can fill in their names.
15. The latest sheet of group is put on the internet course web site,
16. Without a serious legal excuse, not coming on time is not acceptable,
17. The students are responsible for their lab sessions individually, any request for changing the are not acceptable, so the students have to decide carefully in which session they are going to attend,
18. No more than fifteen minutes of delay is acceptable for students coming to laboratory sessions,
19. Students are not on time may graded in a different way depending on the situation, so please pay attention to entrance time,
20. Workbench of each student must careful cleaned up at the end of the session,
21. Cleaning up the workbench after every experimental procedure is a very important in the sense of keeping the workbench

22. The students not paying attention to their workbench cleaning will be warned only once, and will get penalty grades afterwards, please pay attention,

Provision of laboratory equipment:

23. Every laboratory sheet is going to be put on the course web site one week before of the laboratory hour,
24. The laboratory equipment written on the laboratory sheet must be provided by the students prior to the laboratory hour,
25. The student groups without required equipment are not able to attend the laboratory hour, please be careful,
26. During first few lab sessions, instructor(s) mark student breadboards with group member, student identity and student names to prevent obfuscation,
27. Breadboard circuit setups without valid group number or a valid student name and ID, will not be acceptable,
28. Each group have an experiment set of numbered oscilloscope (x1), signal generator (x1) and a pair of oscilloscope probes (x1) are marked with student group number.
29. Student can never use of the numbered equipment if the equipment number differs from their group number.
30. In case of malfunction of any of those numbered equipment will be logged with a signed A4 document having the signs of both users and instructors(s).
31. After the log of a detected breakdown a new or a temporary equipment will be provided,
32. In every lab session, each group is responsible of testing and calibrating their own equipment,
33. Wrongly made equipment tests and calibrations are considered as lack of knowledge will be graded accordingly,

Laboratory session rules:

34. Due to the time constrains students are to be busy only performing their experimental procedure,
35. Each group must be work individually,
36. The instructor(s) must keep track of each group's experimental state to evaluate correctly,
37. Experimental setups and results must be shown to instructor(s) within the lab tie slice, laboratory performance grading will be according to how well the experimental procedure is begin carried out,
38. Questions in the experimental sheet must be concluded with correct answers within the end-of-lab report,
39. End-of-lab reports are going to be submitted on time when the instructor(s) specify, (normally one week after session),
40. The end-of-lab reports that are not submitted on time are not going to be evaluated, and will have negative effect in grade contribution,

Submission end-of-lab reports:

41. During the lab, end-of-lab report of previous week are submitted to the instructor(s),
42. The instructor(s) will neglect the report that is not written according to given guideline in Figure (1)
43. The students and the instructor(s) have to keep the group number sorting of the end-of-lab submissions,
44. In the other times the student can come to office of instructor(s) for submission,

Main evaluation criteria:

45. *Preliminary Works* are to be prepared as handouts and the be brought to the related lab session,
46. Any unfinished parts of the *Experimental Procedure* must be added to *end-of-lab report* with any proper simulation program that perform can required plots and measurements.
47. Copying the work of another is strictly forbidden, and will not be tolerated by the instructor(s),
48. Detected students who copy other students work will have the grade that divided into the number of same paper holders,
49. The end-of-lab reports not having the page formatting given by Figure (1) going to be neglected,
50. Make up experiments are graded between 0 to 75,

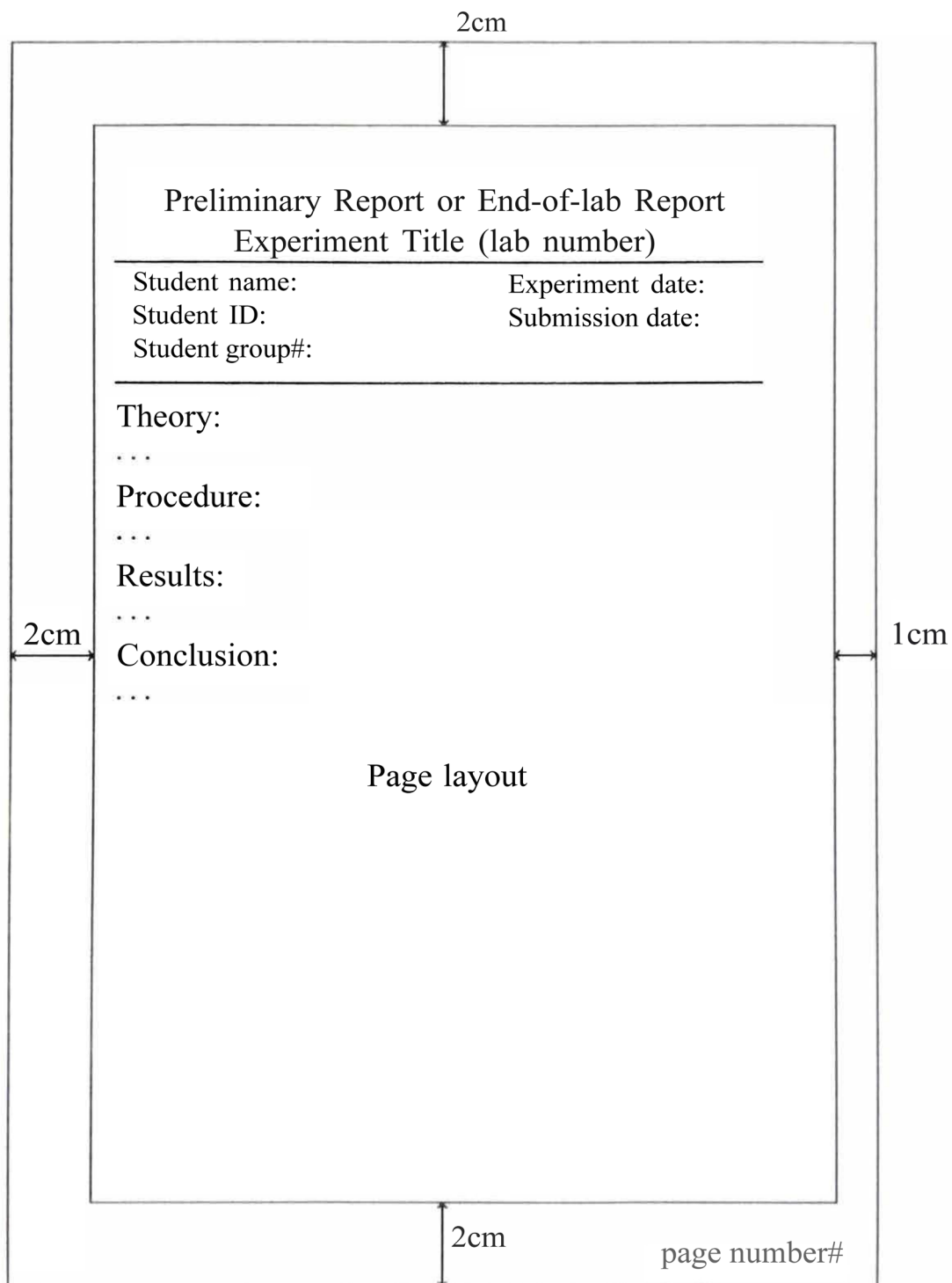


Figure 1: The first page of the preliminary work and the end-of-lab report submission a4 page format. Students can use as many pages as they want under this page format. Additional pages can be attached to the very first page without title.

Experiment Titles:

Power Amplifier Classes
JFET Characteristics
Source Grounded JFETs
E-VMOSFET Characteristics I
E-VMOSFET Characteristics II
Frequency Response of Amplifiers

Personal equipments: It is important that the following equipment be provided by the students at all of the experiment sessions,

1x Digital multi-meter

Grading:

51. The ultimate laboratory affects 30% of the whole course grading,
52. Students fail the related lab hour if they have not a valid Preliminary Work document,
53. Experiment Grade = 50% x Laboratory Performance + 50% End-of-lab Report,
54. Ultimate laboratory grade will be a weighted sum of the experiment grades of each student. The weights are mostly distributed as equal but can be increased or decreased with respect to the hardness of the laboratory.

End-of-lab report contents:

Theory: May consist of analysis of the experimental circuit, please do not add textbook information,

Procedure: Reveals the how the experimental procedure is carried out,

Results: Reveals the obtained results, may include the questions asked in the experimental procedure,

Conclusion: Stans for students own findings an discussion.

Make-up Laboratory:

Make up laboratories will be on different day in the end of the term.

End of the document.