

King Fahd University of Petroleum and Minerals
Electrical Engineering Department

EE 340 - Electromagnetics
Laboratory Schedule (151) - Section: 52

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Office Hours: M. T. 12:30 PM - 01:30 PM
Or by an appointment.

Weeks	Date	Experiments
1	24 Aug	No lab
2	31Aug	Problem Session I
3	7 Sep	Problem Session II
4	14 Sep # Quiz PS	Exp. 1: Electric Field & Potential Inside Parallel Plate Capacitors
		Eid break
5	29 Sep - 1 Oct	No lab
6	5 Oct	Exp. 2: Capacitance & Inductance of Transmission Lines
7	12 Oct	Exp. 3: Simulation of Electric Field and Potential Inside Capacitors
8	19 Oct # Quiz 1	Exp. 4: Magnetic Field Outside a Straight Conductor
9	26 Oct	Exp. 5: Magnetic Field of Coils
10	2 Nov	Exp. 6: Magnetic Force on a Current Carrying Conductor
11	9 Nov # Quiz 2	Exp. 7: Magnetic Induction
12	16 Nov	No lab
13	23 Nov	Exp. 8: EM wave demonstration, Radiation, & Radiation Pattern of a Horn Antenna
14	30 Nov # Quiz 3	Exp. 9: EM Wave Transmission and Reflection
15	6 - 10 Dec*	Theoretical and Experimental Lab Final Exams

* Lab final will be two parts: written common to all sections (Dec 6, 2015 at 6:00PM) and experimental in the lab time (Dec 7, 2015).

Grade Distribution (20 %)	
Problem session Quiz	3 %
Lab Quiz	3 %
Lab Report	6 %
Lab Final (Theory 5%+ Exp. 3%) ...	8 %
*Absent	- 0.5
	(+ Zero in Report & Quiz)
*Late	-0.1/5min
*Late Report	-1/day

Lab Report Format

1. Cover Page
2. Objective
3. Equations & Derivations
4. Circuit & Drawings (Experimental Setup)
5. Data Collection (Tables [theor., exp, error])
6. Sample Calculation
7. Plots (Calculated and Experimental)
8. Questions And Answers
9. Conclusion
 - a. Summery
 - b. Results
 - c. Comments

EE 340
Experiment # 1
Experiment Title

Name :
ID # :
Sec # :

Exp. Partners' ID# ID# ID#

Table # 2

Report Writing

- Each student is expected to produce his own report. Groups share experimental results only. Any copying of reports will be considered an act of cheating.
- In writing the report a student is supposed to follow the formal report writing studied in ENGL214. A guideline for formal report writing is given in Appendix A.
- Evaluation of the reports is based on the quality of the following (1) correct format (2) Error analysis (3) Presentation of results and (4) Discussion and answer to questions.

EE Department Lab Attendance Policy:

- At least -0.5 point for each unexcused absence & -0.1 point for every 5 minutes late should be deducted out of the student final grade.
- 2 absences (with or without an official excuse) = official warning.
- 3 absences (without excuse) = DN.
- 4 absences (with/without excuse) = DN.

Notes to the students:

1. **Only official excuses are accepted.** Official excuses must be submitted within 10 days of the official excuse date, otherwise the lab instructor may refuse to accept it.
2. Originality of lab reports. All submitted lab reports must be original and must be based on experimental data taken during the course of the experiment. If a student submits an old report, he will get an automatic zero for the report and a final warning.