

### King Fahd University of Petroleum and Minerals

### Department of Electrical Engineering

### EE-370

# Communication Engineering I Laboratory Manual

Ву

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### PREFACE

Welcome to the EE370: Communication Engineering-I Lab. As course & Lab instructors, we do hope that you will enjoy working out the experiments. The idea of these experiments is that you will do a combination of MATLAB simulation experiment followed by a hardware circuit experiment to really grasp and fully understand the main concepts of communication engineering. We tried our best to relate what you are learning in class with what you are taking in the lab. The following outlines the general policies for the lab:

#### Grading Policy:

- 8% for Lab Reports
- 2% for Pre-labs
- 4% for Lab performance
- 6% for Lab Final

which will add-up to 20% for the Lab grade.

#### Lab Report:

- You must submit the report at the beginning of the new following lab.
- The report must have a cover page.
- It must have the following:
- 1. Lab objective.
- 2. Clear theoretical concepts & equations used.
- 3. Description of the lab results or data collected and plotted.
- 4. Conclusions.
- 5. Appendices showing your source code and results of the simulations or plotted data.

Note: You can follow the sample report included below.

#### **Important Notes:**

- 1) Always bring an empty floppy disk with you.
- 2) Each unexcused absence will result in a grade of ZERO for that experiment.
- 3) As per university rules, <u>three</u> unexcused absences will cost the student a DN grade.
- 4) No make-ups are allowed.
- 5) Any kind of cheating in is forbidden and will be treated according to the university rules. Just do your work independently.

### Lab Report Sample

King Fahd University of Petroleum & Minerals Electrical Engineering Department

#### EE370 Communication Engineering I

Lab Report for Experiment No#

Place the title of the experiment over here

#### Prepared for

(Place the name of your lab instructor)

By

(Place your) Name ID No. Section No.

(Place the date of the lab experiment)

• Objective:

Place the objective of the experiment here

- Equations, general concepts and theoretical background: *Place the equations if they exist & your general fundamentals of the experiment here*
- Observations & discussion:

Write your comments independently regarding the simulations you've done or the results you've obtained through the whole experiment in details. They should be very clear, well written & logically convincing the reader of the report. You have to refer to the simulations or plots accordingly

• Conclusion:

*Write a brief conclusion stating the main lessons that you've learnt from running the experiment.* DON'T REPEAT THE OBJECTIVE HERE OR DESCRIBE THE EXPERIMENT AGAIN!

- Appendix I: (put Matlab Code here, or other relevant material)
- Appendix II: (put Matlab simulation figures, or other lab plots and results)

## LIST OF EXPERIMENTS

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