

RTE 305, FALL 2015
LAB PROCEDURES AND LAB REPORT GUIDELINES

COMMUNICATIONS SKILLS:

- Effective Communication is part of the course. This goal will be met by requiring that lab reports be structured, neat, and well written. Grading will give comparable weight to grammatical quality as well as technical merit.
- All reports must follow an accepted technical writing style which must be concise, technically correct, and grammatically sound. Some reports will follow a formal format while others will be a simple standard lab report. The instructor will designate the type of report for each lab exercise and provide guidelines for preparing the report.
- Effective Communication also requires that the course shall teach and develop good oral communication skills. This goal will be met by requiring that each lab group will complete a Research Project and present the results before the class in the form of an oral presentation.

LAB EXERCISES:

- The lab portion of this course will consist of 7 or 8 lab exercises. These exercises will be performed in small groups or squads similar to previous labs. The instructor will distribute the exercise at the beginning of each session and provide a short lecture to introduce and explain the work to be done. Some lab exercises may require more than the allotted time and in that event will be extended to the following week.
- You are not required to purchase a lab manual for this course but a good quality notebook must be used to record data and notes for the lab.
- Each member of the lab group is expected to participate in the lab exercise. If necessary, supervisors will be appointed for each group who will assign each squad member a responsibility for a portion of the lab.
- It is expected that each student will be present and ready to proceed at the designated starting time of the class. Persons who are habitually late will be penalized 5% of the lab exercise grade for that day.
- No lab exercises are scheduled for the week when exams are scheduled for the lecture portion of the course. The instructor will be present in the lab during these days for help or assistance in planning the final project, but the free days are **not** to be considered as a chance to make up a missed lab. It is the student's responsibility to attend each lab session at the designated time for the particular section.
- All lab equipment must be treated with care. Careless procedures, rough handling of the equipment, dropping meters, etc. is considered unacceptable behavior and will be penalized. All wires, probes, and leads shall be returned to their proper places in the storage area following each lab exercise.

LAB REPORTS:

- Lab reports are extremely important in this course because of the Effective Communication designation. Guidelines will be issued for an accepted format. All material should be carefully organized and explained well (but concisely).
- All reports shall be done with Microsoft Word or similar word processor. Reports shall be printed on only one side of the paper.
- All graphs, circuit diagrams, etc. must be well labeled and/neatly drawn using appropriate computer software.
- All lab reports are due by the **beginning** of the next lab period. Any report not turned in at the beginning of the period **will be considered late**. (You are responsible to have the report completed and for remembering to bring it along prior to coming to the next lab). **Late reports will be penalized 10% for the first week late, 20% if two weeks late. Reports more than two weeks late will not be accepted and a zero will be given for that particular exercise.**
- Lab exercises are conducted as a group or “team”. It is acceptable to plan the procedures, work problems, develop data tables, take notes, etc. together but each report **MUST** be an individual effort. It is unacceptable to have one person type up any section of the report, prepare graphs, etc. and then prepare copies for the other members of the lab team. It is acceptable for one person to take notes, record raw data, develop hand sketches, diagrams, etc. and then duplicate the hand written material for each member to use for their individual report preparation, provided each member participated in the exercise. Each member is responsible for his/ her individual report preparation including construction of circuit diagrams, formal data tables, plotting graphs, procedural explanations, summaries, etc.
- You must actually be present and perform the lab exercise. It is unacceptable for any team member to furnish lab data to a student who was not present or for a student who was not present to solicit the lab data with the anticipation of preparing a report. This considered a serious violation of the Penn State accepted standards of conduct.

MISCELLANEOUS INFORMATION:

- The Research Project for this lab may require the purchase of some materials by the lab group. The cost would depend upon the project chosen and should be shared equally among the group.
- The total score from the lab exercises is 75% and the Research Project is 25% of the Lab portion grade for RTE 305.