

## Expectations for Laboratory Work and Lab Reports

Many universities are using an unusual format for laboratory session: students are asked to complete the whole laboratory experiment in a single session and must also hand in their data collection, data analysis, data evaluation, and conclusion at the end of the lab period. I am going to try this format with two goals in mind:

- To train you the new format in order to better prepare you for university.
- To reduce the amount of homework you have late in term so that you might begin reviewing for exams.

In each lab, there will be a pre-lab exercise; this will consist of the preparation of a flow chart for the experiment and all tables, (both qualitative and quantitative), necessary for the experiment. The pre-lab exercises relate to the experiment and will give you an opportunity to better understand the theory of the experiment and the pertinent calculations associated with it.

As well, you will be required to read, understand the purpose of the lab, prepare and have knowledge of the chemicals being used in the experiment, i.e. a material safety data sheet (MSDS) must be included with the pre-lab assignment. This should explain how to use the chemicals safely and what to do in an emergency, and the safe disposal of the chemical. The MSDS is a source of detailed information about the chemical, and provides data on which effective workplace controls for this material may be used.

You will be required to have the pre-lab sheet as well as the MSDS prepared before you will be allowed to perform the experiment in the laboratory. The pre-lab exercises are included in the overall lab mark, and will probably require very little of your time. In addition to being easy marks, preparing the pre-lab assignment will cut down the amount of time wasted in the laboratory and will really help you to perform the experiment efficiently, quickly and will ensure safety.

With a clearer understanding of what you are going to be doing in the laboratory, you will find the chemical laboratory to be a safe place in which you can learn much about chemistry and at the same time have a most rewarding and an enjoyable experience.

You will need to complete all calculations needed, (and/or any graphs), to accomplish the purpose of the experiment; and are required to submit these at the end of the laboratory period. All question and conclusions must be done in the lab as well.

Although you may work with your partner to check answers and methods of calculation, however you are required to submit an individual report. **Any evidence of copying will result in a grade of 0 to both partners, irrespective of who has done the cheating.**

It should be quite apparent to you that when you come to the lab, you are prepared to perform the task given, complete all questions, calculations and conclusions, and hand in the lab at the end of the class.

“Real” Chemistry is experienced in the laboratory.