

LABORATORY GUIDELINES

There are nine laboratory sections scheduled for this quarter which leaves one week "off" for midterm review. The labs have been organized to follow the lecture schedule: There may, however, be times when the labs and lectures become out of sync. For this reason, and for your own sanity in performing and writing up your lab reports, we **STRONGLY** recommend that you **THOROUGHLY** read the lab descriptions before you come to lab. You will have enough to do in this class without being stressed and confused as you try to do these labs.

There is also a mandatory field trip with an optional computer exercise if you absolutely cannot attend the field-trip. Participation in the field trip will be included as part of your lab grade.

Points

Each lab report is worth 10 points, and there is an additional 10 point for participation in the field trip (only a very brief write-up. Just be there and learn something!). Thus there are 100 points possible for the laboratory section.

Most of the lab exercises are to be written up as group lab reports: Thus you will have to find a group to work with. Most students find that they work with the same group throughout the quarter, although this is not a requirement. The group will receive a single score for the report, although you may indicate who wrote each section if you feel this is important. You are required to write up one of the reports on your own, the choice of which is yours.

Format

Lab reports are to be written following the guidelines outlined on the next page. Details of the contents of a well written lab report will be discussed in the discussion section of week one (on the Friday preceding the first lab sections).

Feel free to ask for help when you need it! Good Luck!

GRADING GUIDELINES FOR COMPOSITION OF LAB REPORTS

HYDROLOGIC SCIENCE 100

In general, a laboratory report achieving a perfect, or near perfect score will have the following qualities and address, where appropriate, the questions in the outline below.

Qualities of a lab report obtaining a perfect score include:

- a well-defined purpose, or objective statement;
- clear organization and development of procedures and data analysis;
- sentence variety;
- appropriate use of transitions;
- few, if any, mechanical, grammatical, spelling, or diction errors; and
- demonstrates command of the material.

Each lab report should address items, as needed, in the outline below.

A. Introduction:

- (1) define problem and purpose of experiments
- (2) provide background information
- (3) briefly explain methodology
- (4) indicate principal results

B. Methods and Materials:

- (1) correctly identify quantities and materials
- (2) clearly stated and correctly ordered methods
- (3) provide sufficient information for reader to reproduce experiment

C. Results

- (1) data is clearly organized and presented in meaningful fashion
- (2) information provided by tables and graphs is not repeated in text

D. Discussion:

- (1) present principles, relationships and generalizations supported by **Results**
- (2) indicates exceptions, lack of correlations, and other unresolved problems

E. Summary and Conclusions:

- (1) clearly state each conclusion and briefly summarize supporting evidence for the conclusion
- (2) summarize the significance of the study