

# Cive 353 – Geotechnical Engineering 1

Instructions for Preparing Laboratory Reports



# Instructions for Preparing Laboratory Reports

- This is a group project and thus a professional and complete report is expected for each lab session
- All lab reports must be submitted to achieve course credit



# **Due Dates**

- One week approx. for Direct Shear, Permeability, and Compaction
- Two weeks for Triaxial
- Approx. one month for Consolidation

CHECK the Schedule posted in LAB...



#### Each Lab MUST Have

- Title Page
- Letter of Submittal
- Table of Contents
- Introduction
- A reference to the procedure
- Discussion (with answers to lab questions)
- Clear, concise and labeled figures
- Clear, complete and neat sample calculations
- Raw Data
- Conclusions
- References



- Letter of Submittal
  - Signed by all group members
  - Consistent with engineering standards
    - Similar to a work place reports
- Table of Contents
  - Should contain lists of figures, tables and appendices



### Instructions for Preparing Laboratory Reports

- Introduction
  - Overview of topic
  - Applicability of the laboratory to geotechnical problems
  - Summary of the topic to be investigated
  - Should NOT contain:
    - Data
    - Conclusions
  - Information must be referenced



#### Discussion

- Should contain answers to lab questions
  - Questions should NOT be answered in list format
  - Questions should be answered in paragraph form
  - Yes and No answers are NOT acceptable
  - Numerical questions should be summarized with a quick overview of how the calculations were done and either a table of values or a reference to a spreadsheet included in the lab report



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- Sample Calculations
  - Hand written calculations are acceptable
  - A sample calculation is required for every different type of calculation performed



#### Conclusions

- Should summarize the results presented in the Discussion section
- No new information can be presented
- Must be presented in paragraph form but can contain summary tables



### Instructions for Preparing Laboratory Reports

#### Explaining Error

- Experimental Error is not a good enough explanation
  - Need to explain the error and why it occurred
  - Outline specific errors in the performance of the lab
  - Use other resources (textbooks, etc...) to determine reasons why your data is inconsistent with theoretical data
- You cannot quote the TA as a reference



#### Extra Information

- Reports can be stapled together binding is not necessary
- Reference all information Plagiarism is a serious offence
- Will be returned after all labs are handed in.