

Lab Policy

Course: Math 120R – Calculus Preparation

Section: 001

Times: MWF 8 – 8:50, T 8 – 9:15

Text: *Functions Modeling Change* (2 ed.)
Connally, Hughes-Hallett, et al.

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Office Hours: Mon 9 – 10

Wed 3 – 4

Tue 11 – 12 (Tutoring room)

Lab projects are an integral part of this course. The projects will require you not only to solve problems but also to explain your methods using clearly written sentences. Writing in a math course may be new to you, but being able to thoroughly explain your thought process is as important as solving problems.

Why write in a math course?

The ability to communicate effectively and to express your thoughts in a way that can be understood by others is an essential skill. By writing in precalculus, you will learn to present your work in a clear and organized fashion. This will provide you with a deeper understanding of the concepts. Writing explanations of your solutions will also allow me to identify concepts that are unclear to you.

Guidelines for writing in math:

- Write as if the reader does not already know what you want to say. Assume that I do not understand how to solve the problem. This assumption will encourage complete answers. Strive for clarity in your writing. The reader can only see what you wrote, not what you meant to say.
- Focus on the process and not the final solution. Describe your thinking. Focus your explanation on why you are doing a certain step and not on the mechanical process used.
- Use an easy to read format. Use complete sentences, and organize your work in a logical manner. Be sure to leave room for comments.
- Avoid using vague words like “it”. Most projects contain many quantities. “It” doesn’t tell which quantity you are referring to. The meaning may clear to you, but not necessarily to the reader.
- Define any symbol that you use that was not introduced in the problem.
- Use complete and proper mathematical notation. Always use units on your answers and label graphs completely.

Specific Lab Procedures:

- The labs will take place on Tuesday. You are expected to be in class. If you miss a lab then you will receive a 0 for that lab report.
- Bring to lab the answers to any pre-lab problems that were assigned. If you fail to do this you are letting down your fellow team members. If you do not have the pre-lab problems done at the beginning of the labs, 25% will be deducted from **your** grade on that particular lab. No exceptions.
- Bring a graphing calculator and the textbook to lab.
- Each lab report will represent the joint work of a group of 3 to 4 people. For each lab, one person (called the lead author) will be in charge of writing up the groups' results. Each member of the group is responsible for the results but it is the lead author's responsibility to represent the final draft in written form. Each member of the group will lead author at least once.
- Each lab report should be written so that anyone familiar with precalculus could pick it up and understand the topic of the week. The lab report is not a list of answers. It should be written in complete sentences and the ideas of the report should flow. Be sure to include an introduction for the reader. The introduction should include an explanation of what the lab is about and the mathematical concepts involved. Length is not important but you must convince me that you and your group understand the concepts.
- The lead author should write up a rough draft and make enough copies for the co-authors. He/she should present these copies to the group the Friday following the lab. Each of the co-authors should read the lab report and make the necessary corrections or comments and return it to the lead author by Monday. The lead author should then make the necessary changes and turn it in at the beginning of class on Tuesday.
- Please be sure to state clearly the lead author's name and the co-authors name on the final version.
- One grade will be assigned to all members of the group.
- Once the lead author has received the corrected lab report back, he/she should make copies for his/her co-authors. The collection of lab reports will form an important collection of notes that one should study in preparing for exams.
- All lab reports must be word processed and all graphs must be done in Excel or other comparable program.
- Throughout the semester you may be asked to present your groups' work to the class. No two groups' lab reports will be the same so by presenting your findings the remainder of the class will be able to gain from viewing a different approach.