

# M599 Lab First Week(s) - OS, L<sup>A</sup>T<sub>E</sub>X, Github

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## 1 Math 599.

### 1.1 Introduction

Welcome to Math 599, Lab 1. This document should look familiar by now. 👍 😊

### 1.2 Objectives

The educational goals of this laboratory will be to acquire a mathematics graduate student understanding of the following topics.

- Basics of operating systems Windows and MacOS Sonoma.
- Basics of Github.
- Basics of L<sup>A</sup>T<sub>E</sub>X, including BibT<sub>E</sub>X .

This list is subject to change.

## 2 Instructions for our activity.

After having a discussion on our topics, you should:

### 2.1 (Instructions you probably should have followed:)

- Familiarize yourself with your computing device.
- Familiarize yourself with your internet searching software on your device.
- (As need may be), familiarize yourself with Github basics. One github hosted tutorial and guide found [here](#).
- Locate José Pabón's github profile page via internet search. If you found a URL ending with 'io', that's the github webpage, not the github profile page.
- Locate the public repository that hosts the information for Lab Activity 1.
- (Create a Github account profile if necessary).

- Download, clone or fork the contents of this repository as you may prefer.
- Follow the instructions on that document.

## 2.2 New instructions:

- Locate website 'Overleaf' (it is just Overleaf.com).
- Create an account on Overleaf. We recommend you use your NJIT email address for these purposes. NJIT pays for professional access to Overleaf; you will have more compile time and other benefits available if you do.
- (If there are prompts for payment, we do not recommend you pay anything).
- After having a discussion on  $\text{\LaTeX}$  basics, you should compose a  $\text{\LaTeX}$  typeset pdf output document.
- The document should show off your  $\text{\LaTeX}$  skills. You should use inline math commands, display math, lists, various environments including itemize, enumerate, equations, sections, subsections, various mathematical objects (limits? integrals? rational expressions?) etc. .
- Use the verbatim environment to submit your raw  $\text{\LaTeX}$  code within your output pdf document.
- Submit your pdf on canvas.

## 2.3 A couple of good $\text{\LaTeX}$ references.

After our introduction and discussing our working environment, our first topic will be  $\text{\LaTeX}$ . If you are already proficient at  $\text{\LaTeX}$ , great; I look forward to learning some of your favorite tricks.

If you have low familiarity with  $\text{\LaTeX}$ , it would likely be productive if you read some text or textbooks labs.

One good, open source, i.e., free reference about  $\text{\LaTeX}$  is [this book](#) [1].  $\text{\LaTeX}$  is an extremely mature language; there's no shortage of reference material out there for it including [this universal resource link \(URL\)](#).

## References

- [1] Tobias Oetiker, Hubert Partl, Irene Hyna, and Elisabeth Schlegl. The not so short introduction to latex2 $\epsilon$ . 1995.