Introduction to the LaTeX Text Processing System

ICPSR Summer Program

Summer 2024

Instructor:

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Course Time, Location, Office Hours:

TBA

Course Description & Objectives:

LaTeX—or as it is often stylized, LaTeX—is a highly flexible and open-source typesetting system that is suitable for creating scientific publications. This lecture aims to familiarize participants with the basic premises of LaTeX markup language and its different applications. Among the topics covered will include common and useful environments, creating tables, inserting figures, and writing equations. The course assumes no prior knowledge of LaTeX.

Participants are encouraged to follow along with the lecture by typing and compiling new things as they are introduced. While you can do this locally by installing a tex distribution and installing a local latex editor such as Texmaker or TeXStudio (and there are many others), **the easiest and recommended way** to get started is by signing up for a free account on Overleaf. Overleaf is used on the browser and requires an internet connection. You can implement everything in the lecture by using any of these options.

Lecture Agenda

1. Introduction and What You Need
   - Distribution of LaTeX
   - Text Editor
2. The LaTeX document & its compilation
3. Common and Useful Environments
   - itemize

- enumerate

- description

4. Text Size, Spacing, Indentation

5. Tables

   - creating tables

   - using table generators

   - model from R into LaTeX

6. Figures and Graphics

7. Equations

8. BibTex and Citations