



Math & Coding Camp 2024

Coding Camp (Standard/Accelerated)

Instructors: Sheng-Hao Lo (shenghaolo@uchicago.edu)
 Jeffrey Levy (levyjeff@uchicago.edu)
 Regina Medina Rosales (rmedina@uchicago.edu)

Curriculum: Detailed Topics/Modules on Page 2

(Tentative Course Schedule – subject to change)

Day	Date	Lecture/Topic: Standard	Lecture/Topic: Accelerated
1	Tuesday, 9/3	No Coding: Module 0 (pre-work)	No Coding: Module 0 (pre-work)
2	Wednesday, 9/4	Lecture 1: Module 1	Lecture 1: Modules 1&2
3	Thursday, 9/5	Lecture 2: Module 2	TA Session Only
4	Friday, 9/6	Lecture 3: Module 3	Lecture 2: Modules 3&4
5	Monday, 9/9	Lecture 4: Module 4	TA Session Only
6	Tuesday, 9/10	Lecture 5: Module 5-1	Lecture 3: Module 5
7	Wednesday, 9/11	Lecture 6: Module 5-2	TA Session Only
8	Thursday, 9/12	Lecture 7: Module 6-1	Lecture 4: Module 6
9	Friday, 9/13	Lecture 8: Module 6-2	Lecture 5: Module 7
10	Monday, 9/16	Lecture 9: Module 7-1	Lecture 6: Module 8
11	Tuesday, 9/17	Lecture 10: Module 7-2	Lecture 7: Module 9
12	Wednesday, 9/18	Lecture 11: Module 8	Lecture 8: Module 10
13	Thursday, 9/19	Lecture 12: Module 9	TA Session Only
14	Friday, 9/20	Lecture 13: Module 10	TA Session Only



Detailed Topics/Modules:

Module 0: R and RStudio Installation Guide

Module 1: An Introduction and Motivation for R Programming

Module 2: Installing Packages and Reading Data

Module 3: Vectors and Lists

Module 4: If Statements

Module 5: Data Manipulation and Analysis (I)

- Standard: Base R (5-1), Tidyverse (5-2)
- Accelerated: Base R + Tidyverse

Module 6: Data Manipulation and Analysis (II)

- Standard: Base R (6-1), Tidyverse (6-2)
- Accelerated: Base R + Tidyverse

Module 7: Data Visualization

- Standard: Base R (7-1), Tidyverse (7-2)
- Accelerated: Base R + Tidyverse

Module 8: Grouped Analysis

Module 9: Iteration

Module 10: Functions