

CMSE 201 Fall 2020 - Schedule*

Day	Topic
1 (Sep 2/3)	Class expectations, pre-course survey, group sorting algorithm activity
NO CLASS (Sep 7/8)	Labor Day (no class for Monday sections, Tuesday sections cancelled to keep things in sync)
2 (Sep 9/10)	Practice with basic python variables (Order of Magnitude Approximations)
3 (Sep 14/15)	Lists and loops
4 (Sep 16/17)	Data Ethics, Academic Integrity, Coding Practices
5 (Sep 21/22)	If statements + intro to functions
6 (Sep 23/24)	Quiz #1 + Functions
7 (Sep 28/29)	Modules (math and matplotlib)
8 (Sep 20/Oct 1)	NumPy Basics (loading and plotting data)
9 (Oct 5/6)	Basic statistics + pandas with economics data
10 (Oct 7/8)	Quiz #2 + Pandas with Flint Data
11 (Oct 12/13)	Working with "dirty data" and data formats
12 (Oct 14/15)	Linear regression (fitting polynomial models; interpreting the results of a fit)
13 (Oct 19/20)	Linear regression (fitting beyond the polynomial; curve fitting)
Q (Oct 21/22)	Quiz #3
14 (Oct 26/27)	Intro to ordinary differential equations and "solve_ivp()"
15 (Oct 28/29)	Compartmental modeling 1
16 (Nov 2/3)	Compartmental modeling 2
17 (Oct 4/5)	Quiz #4 + More NumPy (array creation and manipulation focusing on 2D arrays)
18 (Nov 9/10)	Agent-based modeling 1 (Forest Fire)
19 (Nov 11/12)	Agent-based modeling 2 (Schelling 1D)
20 (Nov 16/17)	Random Numbers + Random Walks
21 (Nov 18/19)	Quiz #5 + Project updates and in-class project work time
22 (Nov 23/24)	Modeling COVID-19
NO CLASS (Nov 25/26)	Thanksgiving (No class on Thursday, Wednesday sections cancelled to keep course in sync)
23 (Nov 30/Dec 1)	Climate Change Modeling 1
24 (Dec 2/3)	Climate Change Modeling 2
25 (Dec 7/8)	Project Presentations
26 (Dec 9/10)	Project Presentations
Dec 14 - 18	FINALS WEEK (Quiz #6)

*This is the tentative schedule prior to the start of the semester. The overall content shouldn't change, but ordering or deadlines may shift somewhat. If deadlines change, substantial notice will be given!