

First Day of Classes: January 8, 2024

Last Day of Classes: April 26, 2024 (15 week semester)

MLK Day: January 15, 2024

President's Day: February 19, 2024

Spring Break: March 10, 2024 - March 17, 2024

Class	Date	In Class Topic	Assignment Due	HW Assignment
1.1		Introduction and Icebreakers Intro to Multi-Omic Data Analysis Cancer Biology		Materials Download
1.2		Guest Speaker: Dr. Jerry Lee Introduce Literature Presentations		Literature Presentations
2.1	No Class			
2.2		Literature Presentations	Literature Presentations, Materials Download	
3.1		Bash and GitHub		Intro to R and RStudio
3.2		Introduction to TCGA, TCGA Clinical Data		
4.1		Data Cleaning and Boolean Indexing	Intro to R and RStudio	Clinical Data

Class	Date	In Class Topic	Assignment Due	HW Assignment
4.2		Survival Curves / KM Plots		
5.1		Mutation Data and MAF Files	Clinical Data	Mutation Data
5.2		Mutation Plots (Mutation Data Practice)		
6.1		SummarizedExperiment and Processing RNA Data (RNA Data Practice)	Mutation Data	RNA Data
6.2		RNA Data and Differential Expression		
7.1	No Class		RNA Data	R Review Project
7.2		R Review Week (TA Lecture)		
8.1		Med/Grad Panel	R Review Project	Intro to Python
8.2		Industry Panel		
9.1		Pandas and Control Flow	Intro to Python	
9.2		Intro to CPTAC and Proteomics + Intro to Final Project and Multi-Omic Analysis		Intro to CPTAC, Final Project Proposals
	3/10 - 3/17	Spring Recess		

Class	Date	In Class Topic	Assignment Due	HW Assignment
10.1		Processing Data for ML		
10.2		Supervised Learning	Intro to CPTAC	Machine Learning
11.1		Unsupervised Learning		
11.2		Evaluating Machine Learning Models	Machine Learning, Final Project Proposals	Python Review Project
12.1		Protein Review Week (TA Lecture)		Lab Search + Resume
12.2		Finding Research at USC	Python Review Project	
13.1		In class work time		
13.2		In class work time		
14.1		In class work time	Lab Search + Resume	
14.2		In class work time		
15.1		Practice Presentations		
15.2		Practice Presentations		
Final	TBD	Presentations [REDACTED] Time TBD	Final Project: Paper, Final Presentation, Code	