

Course timeline (subject to change)

Assignments are due by the beginning of the next meeting unless indicated otherwise. For assignments, R Notebooks must be submitted through Blackboard as HTML files but with a txt extension.

Week	Date	Topic		Notes	Assignments
1	6/3	R Programming Fundamentals		Module1 – Module 2	Lab1 and Lab 2
		R Programming / Exploring Data with Graphs and Numerical Summaries			
2	6/10	Associations between Variables		Module 3	Lab 3
3	6/17	Advanced R Programming Concepts	Review / Exam I		
4	6/24	Basic Concepts in Probability and Probability Distributions; Normal Distribution		Module 4	Lab 4 (collected) and Lab 5 (not collected)
5	7/1	Statistical Inference		Module 5 (Significance Tests, Significance Tests about Proportions, Decisions and Errors)	Lab 6
6	7/8	Statistical Inference		Module 5 (Student’s t distribution and two-sample t-test)	Lab 7 (Due: 7/22)
7	7/15	No class		-	-
8	7/22	Gene Expression	Review/ Exam II		
8		Gene Expression and Microarrays, Downloading and Normalization of Gene Expression Data			
9		Identification of Differentially Expressed Genes			
10		Heatmaps and Classification			
11		Functional and Gene Set Enrichment Analysis			
12		Final Projects and Advanced Topics			
13		Review / Exam III			

