

Date	lecture #	Topic	Reading	Assignments
25-Aug	1	Introduction	Tree Thinking Handout, Baum 2005	
27-Aug	2	Tree thinking, Sequences and Evolution		
29-Aug	3	Introduction to sequence comparison		
1-Sep Labor Day			Ch 4.1-4.4, Ch 5.1- 5.2	
3-Sep	4	Alignments/Dynamic Programming		
5-Sep	5	Alignments/Scoring Systems		Tree Thinking Quiz
8-Sep	6	Alignments/Scoring Systems	Ch 4.5	
10-Sep	7	Alignments/review and practical examples		
12-Sep	8	Intro to Sequence Searching		Quiz
15-Sep	9	Sequence Searching	Ch 4.6-4.7, Ch 5.3-5.4	
17-Sep	10	Sequence Searching		
19-Sep	11	Sequence Searching		
22-Sep	12	Sequence Motifs	Ch 4.8-4.10	
24-Sep	13	Sequence Motifs		
26-Sep	14	Sequence Motifs		
29-Sep	15	Trees and Phylogeny	Ch 7 (all), Ch8.1-8.2, Ch 8.4-8.5	
1-Oct	16	Trees and Phylogeny		
3-Oct	17	Trees and Phylogeny		
6-Oct	18	Trees and Phylogeny		
8-Oct	19	Midterm 1 (Covers Lectures 1-14)		
10-Oct	20	Multiple Alignment	Ch 6.4-6.5	
13-Oct October Break				
15-Oct	21	Multiple Alignment		
17-Oct	22	Profiles and HiddenMarkov Models	Ch 6.1-6.3	
20-Oct	23	Profiles and HiddenMarkov Models		
22-Oct	24	Genome Sequencing and Assembly	Ch 9 (1II), Ch 10 (except 10.1)	
24-Oct	25	Genome Sequencing and Assembly		
27-Oct	26	Gene Finding and Annotation	Ch 5.5	
29-Oct	27	Gene Finding and Annotation		
31-Oct	28	Gene Finding and Annotation		
3-Nov	29	Gene Expression Analysis	TBA	Quiz?
5-Nov	30	Gene Expression Analysis		
7-Nov	31	Gene Expression Analysis		

10-Nov	32	Protein Structure Prediction	Ch 11.1-11.4, Ch12.4-12.3	
12-Nov	33	Protein Modeling		
14-Nov	34	Midterm 2 (covers lectures 15-31)		
17-Nov	35	Protein Modeling	Ch 11.5-11.8, Ch 12.4-12.5	
19-Nov	36	Protein Modeling		
21-Nov	37	Protein Modeling		
24-Nov	38	Protein Modeling		
26-Nov Thanksgiving				
28-Nov Thanksgiving				
1-Dec	39	Systems Biology	Ch 15.1-15.2, Ch 16.1-16.3, Ch 17.1	
3-Dec	40	Systems Biology		
5-Dec	41	Systems Biology		
8-Dec	42	Systems Biology	Ch 17.1-17.3	
10-Dec	43	Review		
12-Dec	44	Systems Biology		
		Comprehensive Final;		