

BIOC4004 - Tentative Lecture and Workshop Schedule

Lecture	Day	Date	Lecture Topic	Important Dates
0	Mon	05-Jan-04	Introduction to the course, syllabus & handouts, course format, evaluation. Intro to biotechnology.	
1	Wed	07-Jan-04	Review of genes: gene structure and regulation	
2	Fri	09-Jan-04	Review of genes: gene structure and regulation, translation	
3	Mon	12-Jan-04	Review of recombinant DNA techniques: enzymatic manipulation of DNA, cloning, botting, sequencing, PCR	
4	Wed	14-Jan-04	Review of proteins: basic protein structure, intro to concepts in protein engineering	
5	Fri	16-Jan-04	Protein Engineering; Protein Expression	Last day for course changes / Seminar Topic due !
	Mon	19-Jan-04	Class Cancelled	
6	Wed	21-Jan-04	Protein purification; Analytical techniques	
W1	Fri	23-Jan-04	Group 1	
7	Mon	26-Jan-04	Heterologous Expression Systems	
8	Wed	28-Jan-04	Large-scale production; Fermentors	
W2	Fri	30-Jan-04	Group 2	
9	Mon	02-Feb-04	Mammalian Protein Expression; Bioreactors	
10	Wed	04-Feb-04	Proteins as drugs; Intro to Monoclonal antibodies	
W3	Fri	06-Feb-04	Group 3	Research Proposal Topic & Paragraph due !
11	Mon	09-Feb-04	Antibody production; antibody engineering	
12	Wed	11-Feb-04	Bioinformatics I: Introduction to bioinformatics	Liposomes: applications of liposomes
W4	Fri	13-Feb-04	Group 4	
	Mon	16-Feb-04	Reading Week	
	Wed	18-Feb-04	Reading Week	
	Fri	20-Feb-04	Reading Week	
13	Mon	23-Feb-04	Bioinformatics II: Alignments and Sequence analysis	
14	Wed	25-Feb-04	Bioinformatics III: BLAST & molecular databases	
W5	Fri	27-Feb-04		First Evaluation Exercise
15	Mon	01-Mar-04	Genomics I: sequencing projects, sequencing strategies	
16	Wed	03-Mar-04	Genomics II: genome closure, annotation, analysis	
W6	Fri	05-Mar-04	Group 5	
17	Mon	08-Mar-04	Genomics III: DNA microarrays	
18	Wed	10-Mar-04	Genomics IV: microarray analysis, novel array technologies	Bioinformatics Assignment due !
W7	Fri	12-Mar-04	Group 6	Last day for withdrawing from course
19	Mon	15-Mar-04	Proteomics I: introduction to the proteome, 2D-gel electrophoresis	
20	Wed	17-Mar-04	Proteomics II: mass spec and proteomics; Metabolomics	
	Fri	19-Mar-04	Class Cancelled	
21	Mon	22-Mar-04	Systems Biology I: integrating genomics data	
22	Wed	24-Mar-04	Systems Biology II: examining protein-protein interactions	
W8	Fri	26-Mar-04	Group 7	
23	Mon	29-Mar-04	Genomics and Genetics: SNPs, Diagnostics, Forensics	
24	Wed	31-Mar-04	Genomics and Drug Discovery: combinatorial chemistry, high-throughput screening	
W9	Fri	02-Apr-04		Second Evaluation Exercise
	Mon	12-Apr-04		Research Proposal due !