

BIOCHEMISTRY II

BIOC 354000

SPRING 2008

Tentative Class Schedule (subject to change)

Date	Topic	Reading
Jan 23	Introduction	Chs 1-5 (review)
Jan 25	Mendel to the Gene, Central Dogma	
Jan 28	DNA structure	Ch 6, pp 97-111
Jan 29	<i>DNA structure exercise</i>	
Jan 30	DNA structure and information content	
Feb 1	cont.	
Feb 4	DNA Topology.	Ch 6, 111-122, Ch 20, 648-649
Feb 5	<i>Topology and DNA structure problems</i>	
Feb 6	Nucleosomes and Chromatin Problem Set #1 due	Ch 7, pps 151-178
Feb 8	Methods of Molecular Biology	Ch 22
Feb 11	RNA structure and ribozymes	Ch 6, pp 122-127
Feb 12	<i>Methods and RNA Structure problems</i>	
Feb 13	RNA structure cont	
Feb 15	Chemistry and topology of replication	Ch 8, pp 181-200
Feb 18	Replication machinery. Problem Set #2 due	Ch 8, 200-233
Feb 19	<i>Review for exam 1</i>	
Feb 20	Exam 1	
Feb 22	Replication machinery, cont.	
Feb 25	DNA Damage	Ch 9, 235-257
Feb 26	<i>DNA Replication Problem: CAF-1 paper</i>	
Feb 27	Mutagenesis and Repair	
Feb 29	General Recombination	Ch 10, pp 259-284
Mar 3	Site specific recombination	Ch 11, pp 293-302 and 337-341
Mar 4	<i>Repair and Recombination Problems</i>	
Mar 5	Prokaryotic Transcription Problem Set #3 due	Ch 12, pp 347-363
Mar 7	Eukaryotic transcription	Ch 12, pp 363-371
Mar 17	Eukaryotic Transcription, cont	
Mar 18	<i>Transcription Problems</i>	
Mar 19	Processing of Eukaryotic RNAs	Ch. 12, pp 371-400
Mar 21	Processing, cont.	
Mar 24	Translation Part I	Ch 14, pps 411-432
Mar 25	<i>Review for exam 2</i>	
Mar 26	EXAM 2	
Mar 28	Translation Part II	Ch 14, pps 432-459

Mar 31	Translation Part III	
Apr 1	<i>RNA processing problems</i>	
Apr 2	more translation Problem Set #4 due	
Apr 4	genetic code	Ch 15, pps 461-471
Apr 7	Gene expression in prokaryotes	Ch 16, pps 480-502
Apr 8	<i>Translation problems</i>	
Apr 9	Gene expression in proks, cont	Ch 16, pps 512-522
Apr 11	Gene expression in proks	Ch 16, pps 502-512
Apr 14	gene expression in eukaryotes	Ch 17, pps 529-542
Apr 15	<i>Gene expression problems</i>	
Apr 16	Gene Expression in euks, cont. Prob Set #5 due	Ch 17, pps 544-555
Apr 18	Gene expression in euks, cont	Ch 17, pps 556-562, 567-570
Apr 21	Yeast pho pathway	
Apr 22	<i>Review Exam 3</i>	
Apr 23	EXAM 3	
Apr 25	Genes and Development	Ch 10, 285-288, 575-589
Apr 28	Genes and Development, <i>Drosophila</i>	Box 18-4, pps 599-607, 613-630
Apr 29	<i>More gene expression problems</i>	
Apr 30	Molecular Medicine, Part I Problem Set #6 due	Valleix et al, 2002
May 2	Molecular Medicine, Part II	Fanconi Anemia Review
May 5	<i>Review</i>	

The **final exam** for the course is scheduled for **Monday, May 12 1:30-4:00 pm**. You must take the exam at this time! Leaving early for home is not a good reason to take the exam early.