

LIFE SCIENCES 3  
Introduction to Molecular Biology  
Spring, 2007

Lecture	Date	Topics	Reading
Cheng	April 3	Molecular Components	41-54
Cheng	April 5	Protein structure	72-91
Cheng	April 10	Protein function and Techniques	672-679
Cheng	April 12	DNA Structure	97-122
Cheng	April 17	DNA Replication	181-233
Cheng	April 19	RNA structure	122-127
Cheng	April 24	Transcription	347-377
Cheng	April 26	Regulation of Prokaryotic Transcription	483-499
Cheng	May 1	Regulation of Eukaryotic Transcription	529-551
Cheng	May 3	Review for Midterm Exam/Midterm Exam	
Wall	May 8	Eukaryotic Genes & mRNA Processing	371-374, 379-409
Wall	May 10	Translation I: Genetic Code & tRNA	411-423, 461-477
Wall	May 15	Translation II: Ribosomes & Protein Synthesis	423-453, 458-459
Wall	May 17	Viruses & the New Central Dogma	681-684
Wall	May 22	Restriction Enzymes & DNA Mapping	647-653
Wall	May 24	Recombinant DNA Cloning & PCR	654-660
Wall	May 29	Screening & Identifying DNA Clones	651-653
Wall	May 31	Analyzing Cloned Genes, Gene Chips	660-671
Wall	June 5	Genomes, RNA & Gene Regulation	613-619, 635-640, 567-570
Wall	June 7	Final Exam Review	
Wall	June 12	Final Exam	

Text: Molecular Biology of the Gene (Fifth Edition), Cold Spring Harbor Press.  
J. D. Watson, T.A. Baker, S. P. Bell, A. Gann, M. Levine, and R. Losick