Provisional Syllabus for Cell 311, Molecular Biology

Spring 2010, Boggs room 105
Professor David A. Mullin
Office 2000 Stern Hall
Office hours By appointment.
Class meets: T, R: 11:00 am- 12:15 pm, Boggs 243; and 7:00pm-8:15pm, Boggs 242
Text book: "Molecular Biology", third edition (MB) by Robert F. Weaver. Students are expected to study the assigned reading material and PowerPoint presentations prior to attending the lectures.
Blackboard (BB) website: PowerPoint presentations and homework assignments will be posted on this site. You should check the syllabus posted on the BB site on a regular basis because page assignments and other readings associated with lectures may change.

What is Molecular Biology? 
1
Monomers: amino acids and nucleotides  
2
Molecular forces  
3
Structure, function and analysis of proteins  
4-7
Structure and analysis of nucleic acids  
8, 9
Gene cloning, libraries, genomics  
10, 11
Molecular biology methods  
12, 13

First Exam (Tue. Feb. 9, 7 pm)
14 RNA structure function and analysis  
15, 16 Bacterial RNA polymerase  
17, 18 Bacterial Operons and regulons  
19 DNA-protein interactions in bacteria  
20, 21 Bacterial chromosomes and DNA replication

Second Exam (Tue. Mar. 9, 7 pm)
22, 23 Eukaryotic RNA polymerases and promoters  
24 General transcription factors of eukaryotes  
25 Eukaryotic transcription activators and repressors  
26, 27 Capping and polyadenylation of RNA  
28, 29 RNA splicing, RNA editing  
30 Eukaryotic chromosomes

Final Exam—see Tulane exam schedule

Grading: Two midterm exams a final exam count as 25 % each, a term paper (due no later than Mon. April 28) will count for 25. The term paper should be a scholarly product of 5 to 8 pages. See me in person for more info on the paper and to discuss the topic. Homework will help to decide borderline grades. Two or more unexcused absences in the lecture will cause your final grade dropping by one letter. If you miss an exam you will be allowed to take a makeup exam only if you contact me prior to the time of the exam and get my approval. As a reminder: The Honor Code stipulates that "all academic work must be the result of the student's own efforts."