CELL 2050-01  Genetics
Fall 2011
Tuesdays and Thursdays, 12:30 – 1:45 PM
105 Lindy Boggs Center

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phone: (865)-3547

office hours: Wednesdays 11:00 AM – 1:45 PM; Thursdays 10:00 – 10:45 AM; and other times by appointment
I urge you to come to office hours if you need assistance with course material.

additional help: Also, tutoring is offered through the Center for Educational Resources and Counseling.
http://tulane.edu/tutoring/index.cfm


course objectives: The student should be able to describe the relationship between the behavior of DNA, RNA, and protein on the molecular level and the transmission of heritable characteristics. The student should also be able to recognize patterns of inheritance and estimate probabilities of inheritance of Mendelian traits.

attendance/exams: Attendance is taken but is not required except for exams. Make-up exams are not typically given. Exams cover both material from the lectures and the assigned reading.

reading/homework: You are all expected to take an active role in your learning and read the assigned chapter or chapters before class. To promote keeping up with the reading, there will be regular quizzes and homework assignments. Many of these assignments will be managed via Blackboard, which you are expected to visit regularly. http://mytulane.blackboard.com/

honor code: All students are required to adhere to the Honor Code. The Honor Code can be found online.

grading: each exam 25%
all quizzes and assignments 25%

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<th>Grade</th>
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<tr>
<td>A</td>
<td>&gt; 92.5</td>
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tentative schedule

date  day  topic                     chapters/sections from text
Aug 30  T  introduction 1
Sep 1   Th nucleic acid chemistry 9
6       T  DNA packaging 3.1, 10
8       Th cell division 3.2
13      T  DNA replication 11
15      Th transcription 12.1–12.3
20      T  RNA modification 12.4
22      Th translation 13
27      T  Exam I
29      Th lac operon model 14.1

Oct 4   T  more prokaryotic regulation of expression 14.1–14.3
6       Th eukaryotic regulation of expression 15.1–15.2
11      T  more eukaryotic regulation of expression 15.3, 15.5
13      Th fall break
18      T  developmental genetics 23.1–23.2
20      Th mobile elements 17.3
25      T  genetic damage and repair 16
27      Th cytogenetics and chromosomal aberrations 8

Nov 1   T  Exam II
3       Th meiosis and sexual reproduction 3.3
8       T  introduction to Mendel 2
10      Th exceptions to Mendel 4
15      T  matters of sex 3.4, 4
17      Th linkage mapping 6.1–6.2
22      T  problem solving
24      Th Thanksgiving
29      T  gene recombination 17.1

Dec 1   Th epigenetics and mitochondrial DNA 5
6       T  quantitative inheritance 25.1–25.2
8       Th heritability 25.3
15      Th Exam III (8:00 AM – 12:00 PM)