

BIOLOGY 101 - FALL, 2009
INTRODUCTION TO MOLECULES, GENES AND CELLS
COURSE SCHEDULE

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DATE	LECTURE TOPIC	LABORATORY	TEXT
Aug 31 M Sept 02 W 04 F	An Introduction to the Study of Life The Nature of Science The Chemical Basis of Life	No Laboratory	1 - 14 254 - 265
07 M 09 W 11 F	The Chemical Basis of Life The Molecules of Cells (Carbohydrates & Lipids)	Computer Graphing	16 - 31 32 -41
14 M 16 W 18 F	Molecules of Cells (Proteins/Nucleic Acids) Cell Membranes-Structure and Function Transport across Membranes	Scientific Investigation	42 - 49 73 - 79
21 M 23 W 25 F	A Tour of the Cell (prokaryotes/eukaryotes) Organelles of the Endomembrane System Review for Exam I	Cell Structure and Permeability	50 - 71
28 M 30 W Oct. 02 F	EXAM I The Working Cell (Energy) The Working Cell (Enzymes)	Scientific Writing	80 - 87
05 M 07 W 09 F	Glucose Metabolism: An Overview Glycolysis-Cellular Respiration Anaerobic Fermentation	Enzymes	88 - 100 101 - 105
READING DAYS: MONDAY, TUESDAY, OCTOBER 12, 13.			
14 W 16 F	Photosynthesis: An Overview Photo: The Light Dependent Reactions	No Laboratory	106 - 115
19 M 21 W 23 F	Photo: The Light Independent Reactions Review for Exam II EXAM II	Respiration and Photosynthesis	116 - 122
26 M 28 W 30 F	Cell Reproduction Meiosis, and Sexual Reproduction Crossing Over/Chromosome Alterations	Mitosis	124 - 136 136 - 151
Nov. 02 M 04 W 06 F	Inheritance- Mendel's Principles Inheritance- Mendel's Principles Variations on Mendel's Principles	Reproduction and Meiosis	152 - 161 162 - 171
09 M 11 W 13 F	Variations on Mendel's Principles Multiple Alleles , Linkage, Mapping, and Sex-linked Genes	Patterns of Inheritance I	172 - 179

16 M 18 W 20 F	DNA: Molecular Biology of the Gene The Human Genome Review	Patterns of Inheritance II	180 - 190
23 M	EXAM III	No Laboratory	
THANKSGIVING BREAK- 5:00 P.M., TUESDAY, NOV. 24 to 8:00 A.M., MONDAY, NOV. 30			
Dec. 30 M 02 W 04 F	Gene Expression (Synthesis of Proteins) Gene Expression (Genic mutations) Molecular Genetics and Biotechnology	DNA	191 - 207 231 - 251
07 M 09 W 11 F	Gene Regulation (Theory of Operons) Gene Regulation Review for FINAL EXAM	No Laboratory	208 - 212
READING DAYS: SATURDAY, DEC. 12 AND WEDNESDAY, DEC. 16			
COMPREHENSIVE FINAL EXAM: Monday Evening, December 14, - 6:30-9:30 P.M. Mara Auditorium, Masters Hall			

TEXTBOOK: Biology: Concepts & Connections (6th Ed) Campbell, Reece, Taylor, Simon, & Dickey. 2008.
Web site: <http://www.campbellbiology.com> (click onto 6th edition). This site is organized by chapter and includes hyperlinks to resources in biology, self-grading quizzes, and links to biology newsgroups.

GRADE DETERMINATION:

Exam I	15 %
Exam II	15%
Exam III	15%
Lecture Quizzes	15%
Laboratory Grade	25%
Comprehensive Final	15%

EXAMS: All exams will be comprehensive; they will evaluate your understanding of all lecture and laboratory material covered to that point in time. Exams must be taken on the scheduled dates and times.

LECTURE QUIZZES: The dates and number of lecture quizzes **will not** be announced. At the end of the semester, some of the lowest quiz grades will be dropped. No excuses for missed quizzes will be accepted. Students who miss 3 or more quizzes **will be encouraged to withdraw from the course.**

LABORATORY ATTENDANCE: Attending each laboratory period is mandatory. Students absent from two laboratories **will be required to withdraw from the course.**