

Biology Department
BIOLOGY 200: DIVERSITY OF LIFE

Course Number: Bio200

Course Title: Diversity of Life

Objectives & Expectations: This course covers the basic aspects of cell structure, heredity, diversity, classification, evolution and interrelationships of living things with a brief coverage of organs and systems in animals and plants. Laboratory activity reflects the contents of the course (4 credits).

OUTLINE

1. The Life of the Cell (chapters 2, 4, 5, 6, 7)
 - The chemical basis of life
 - A tour of the cell
 - Cell energetics: photosynthesis, respiration
2. Cell Division and Heredity (chapters 8, 9, 10)
 - Mitosis, Meiosis
 - Cellular basis of reproduction
 - Patterns of inheritance
 - Molecular basis of genetics
3. The diversity of living things (chapters 16, 17, 18)
 - Classification of organisms
 - The Animal kingdom
 - The life of plants
 - The microorganisms: prokaryotes, Protista and Mycetatae
 - Viruses
4. Adaptation and Evolution (chapters 13, 14, 15)
 - Population genetics
 - Evolutionary change
 - Selection
 - Speciation and the evolution of diversity
 - Origin of life and history of evolutionary change
5. Interrelationship among living things (chapters 34, 36)
 - Ecosystems and their organization
 - Productivity and energy flow in ecosystem
6. Organisms form and function (chapters 20, 31)
 - Animal system and their functions
 - Plant structure, function, development and reproduction

Grading Scheme:	Exam I:	20%	To be assigned (Includes all material)
	Exam II:	20%	
	Final Exam:	35%	
	Lab:	25%	
lecture			

Textbook: Biology: Concepts and Connections (3rd Edition)
Campbell, Mitchell and Reece
Benjamin/Cummings, an imprint of Addison Wesley, Longman, Inc.

Further references: - Biology: Solomon, Berg, Martin (5th Edition)
Saunders College Publishing
- www.biology.com/cmr