



BIOLOGICAL SCIENCES 101

General Biology

Spring 2011 (1111)

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COURSE PREREQUISITES

high school biology 12 (or equivalent) with a grade of C or better, or BISC 100. BISC 101 and 102 may be taken in any order, and are available for B-Sci credit, but are primarily designed to deliver prerequisite information to BISC majors and related departments and Faculties. Breadth-Science.¹

COURSE DESCRIPTION & CONTENT

Cell Biology (Dr. Punja) (Weeks 1-4)

- Cellular chemistry: structure and properties of biological molecules
- Cell structure: membrane and organelle form and function
- Cellular reproduction : mitosis, cytokinesis and the cell cycle
- DNA, RNA and gene expression
- Cell energy: principles of energetics
- Enzymes
- Cellular respiration

Animal Biology (Dr. Kennedy) (Weeks 5-8)

- Structure and function of tissue types
- Digestion
- Circulatory and respiratory systems
- Excretion and homeostasis; hormones
- Nervous and motor mechanisms

Plant Biology (Dr. Punja) (Weeks 9-12)

- Flowering plants: morphology, anatomy and growth
- Plant reproduction and biotechnology
- Transport processes
- Control systems: plant hormones
- Photosynthesis

TEXTBOOK(S)

Campbell, N.A., and Reece, J.B. 2009. Biology 8th Ed. Benjamin Cummings Publishing Co.

Note: The 7th edition of the textbook is also acceptable

MARK DISTRIBUTION

Lecture Midterm - 20%, Lab. Midterm - 20%, Lab. Final - 20%, Lecture Final Exam - 40% .

Note: There is a 5% penalty for non-attendance in tutorials.

¹Prerequisite Minimum Grade Requirement: Unless stated, a grade of C- or better is required on all Prerequisite BISC & MBB courses.