

MBG 121 Introductory Biology

3 credit hours

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Course Objectives: The primary objective of this course is to explore chemical context of life, water and the fitness of the environment, carbon and the molecular diversity of life, the structure and function of macromolecules, membrane structure and function, metabolism, cellular respiration, photosynthesis, cell communication, the chromosomal basis of inheritance, from gene to protein, the genetics of viruses and bacteria, eukaryotic genomes, DNA technology and genomics, the genetic basis of development

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3. Water
4. Carbon. The basis of molecular diversity
5. Biological macromolecules and lipids
7. Cell Structure and Function.
8. Cell membranes
9. Cellular signalling
16. Nucleic acid and Inheritance.
17. Expression of genes
18. Control of Gene Expression
20. DNA technology
21. Evolution of Genomes

Book: Campell Biology

Grading:

- 1 Midterm (%30) 11 November 2024
- 2 Midterm (%30) 09 December 2024
- 1 Final (%40) 06 January 2025