Basic Chemistry for Biology Students
This DVD discusses atoms, isotopes, and molecules and explains basic concepts related to ionic and covalent bonding and oxidation-reduction reactions. It also examines the structures of peptides, carbohydrates, lipids, and nucleic acids.

Biochemistry I: Atoms, Ions, and Molecules
This DVD describes the basic structures of atoms and shows how ions are formed. It discusses organic and inorganic molecules, polar and nonpolar molecules, and hydrogen bonds.

Biochemistry II: Carbohydrates, Proteins, Lipids, and Nucleic Acids
This DVD explains how polymers are synthesized out of monomers through dehydration. It also looks at the role of carbohydrates; examines the functions of lipids; explains how proteins function as enzymes, hormones, and structural materials; and shows how nucleic acids store information.

Cells: The Structure of Life
This program examines the organelles found in eukaryotic cells: the nucleus, ribosomes, endoplasmic reticulum, Golgi apparatus, lysosomes, chloroplasts, mitochondria, plastids, vacuoles, cilia, flagella, and cytoskeleton. It also shows how cellular shape varies according to cellular function.

Cellular Reproduction: Mitosis, Cytokinesis, and the Cell Cycle
This program introduces the cell cycle, describes the asexual process of binary fusion in prokaryotic cells, examines the eukaryotic cell cycle through each stage of mitosis, and illustrates the differences between cytokinesis in animal and plant cells.

Meiosis, Sexual Reproduction, and Genetic Variability
This DVD compares asexual and sexual methods of reproduction, discusses haploid and diploid cells, and introduces the three major eukaryotic life cycles.

Cellular Respiration: Energy for Life
This DVD illustrates the steps of glycolysis, outlines the Krebs cycle, and examines anaerobic and aerobic respiration. It also highlights the role of ATP in supplying energy for cellular processes. It offers illustrative explanations that help students better understand the ways in which cells acquire and use energy. Highest Recommendation, Video Rating Guide.

Cell Membranes: The Boundaries of Life
This DVD examines the structure of the cellular wall and highlights the major functions of cellular membranes. It discusses transport, recognition, and receptor proteins and considers simple and facilitated diffusion, passive and active transport, and osmosis.

Plasma Membranes and Solutions
This DVD investigates the characteristics and structures of plasma membranes and examines such related processes as diffusion, osmosis, facilitated and active transport, endocytosis, and exocytosis. It considers environmental factors that affect the speed of diffusion and discusses characteristics of hypertonic, hypotonic, and isotonic solutions.
The Role of Enzymes
This DVD looks at the functions and characteristics of enzymes in the human body. It explains how the enzyme-substrate complex speeds up processes, while activation energy decreases during a given reaction period. The program also shows how genetic engineering has led to the isolation of specific enzymes.

DNA, RNA, and Protein Synthesis: Information to Structure
This DVD looks at the structure of DNA, details the process of replication, and shows how DNA carries out its four major functions. The program also discusses transfer, messenger, and ribosomal RNA.

Genetic Technology One
This set explores genetic technology; explains how restriction enzymes are used in the laboratory; and discusses the processes of gel electrophoresis, DNA fingerprinting, polymerase chain reactions, gene cloning, and recombinant techniques. It also considers ethical issues related to stem cells and mammalian cloning.

Genetic Technology Two
This set explores genetic technology; explains how restriction enzymes are used in the laboratory; and discusses the processes of gel electrophoresis, DNA fingerprinting, polymerase chain reactions, gene cloning, and recombinant techniques. It also considers ethical issues related to stem cells and mammalian cloning.

Understanding Stem Cells
This DVD introduces stem cells. It discusses the differences between embryonic and adult stem cells, looks at in vitro fertilization as an important source of embryonic stem cells, explores therapeutic and reproductive cloning, highlights potential medical applications of stem cell research, and considers associated ethical issues.

Photosynthesis: Transforming Light to Life
This DVD explains how scientists discovered the complexities of photosynthesis and examines the structural adaptations in leaves that facilitate photosynthesis.