Genetics is the study of genes, genetic variation, and heredity in living organisms. This online textbook covers major topics in molecular genetics in a problems-based approach. It grew out of teaching a course for upper level undergraduates and graduate students at the Pennsylvania State University.

- Unit I: Genes, Nucleic Acids, Genomes and Chromosomes

- Unit II: Replication, Maintenance and Alteration of the Genetic Material
Unit III: The Pathway of Gene Expression

Unit IV: Regulation of Gene Expression

Contributors and Attributions

- **Ross C. Hardison**, T. Ming Chu Professor of Biochemistry and Molecular Biology (The Pennsylvania State University)