



- I. DNA
  - A. Structure
  - B. Replication
- II. Gene Control of Proteins
  - A. Transcription
  - B. Translation
- III. DNA Mutations
  - A. DNA Damage
  - B. DNA Repair
  - C. Transposable elements
- IV. Recombinant DNA Technology
- V. Gene Cloning and Manipulation
- VI. Genomics
- VII. Mendelian Genetics
- VIII. Chromosomes and Heredity
- IX. Bacteria and Phage Genetics
- X. Regulation of Gene Expression in Bacteria and Phage
- XI. Regulation of Gene Expression in Eukaryotes
- XII. Developmental Genetics
- XIII. Genetics of Cancer
- XIV. Non-Mendelian Inheritance
- XV. Population Genetics
- XVI. Molecular evolution

To be selected by Instructor/Discipline Chair.