Genetics is the scientific study of heredity and the variation of inherited characteristics. It includes the study of genes, themselves, how they function, interact, and produce the visible and measurable characteristics we see in individuals and populations of species as they change from one generation to the next, over time, and in different environments.
2: Chromosomes, Mitosis, and Meiosis

3: Genetic Analysis of Single Genes

4: Mutation and Variation

5: Pedigrees and Populations
6: Genetic Analysis of Multiple Genes

- 7: Linkage and Mapping

- 8: Techniques of Molecular Genetics

- 9: Changes in Chromosome Number and Structure
10: Molecular Markers and Quantitative Traits

11: Genomics and Systems Biology

12: Regulation of Gene Expression

13: Cancer Genetics
14: Appendices

Contributors

- **Dr. Todd Nickle and Isabelle Barrette-Ng** (Mount Royal University) The content on this page is licensed under CC SA 3.0 licensing guidelines.