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A Study of Genetics Stressing Human Hereditary Factors: Sociobiology

Guide for Curriculum Unit 87.05.01
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This unit on the study of human genetic factors can be used to teach genetics at the high school level because of the complete coverage of meiosis and DNA material behavior. It may also be used to explain protein synthesis. Human abnormalities attributed to the chromosomal activity and mutational properties at the cellular level. The presentation of the material can be effectively utilized to initiate a whole course in molecular biology and as the introduction suggests the unit material should be presented following an introductory study of cellular structure.

With a good foundation in human genetics and molecular biology students are prepared for a continuation of studies in genetic engineering and may proceed with an advanced placement or college-level biology course in recombinant DNA. An advanced program would take an additional 32 lessons of 1 hour each with additional time allotted for prep time.

Although this particular class does not include special microbiology training due to the great cost involved, it is designed to initiate student investigation in this field of study. More advanced classes could continue with restriction analysis, DNA methylation, transformation by plasmids, and plasmid ligations.

(Recommended for Biology classes, grade 10 and up; and Advanced Placement Biology classes, grade 10 and up)