JEL 201 Population and Quantitative Genetics

Historical development of evolutionary thought; genetic composition of populations; natural selection, including philosophical and historical aspects; genetic equilibrium under selection; basic one-locus two-allele models of large population with mutation, migration, viability selection and inbreeding; small populations; sub-divided populations; basic models of quantitative genetics, including partitioning of values and variances; genetic correlations.

No prescribed textbooks. Suggested readings include Introduction to Population Genetics (D. Hartl & A. Clark), Population Genetics and Microevolutionary Theory (A. Templeton), Genetics and Analysis of Quantitative Traits (M. Lynch & B. Walsh).