

Conservation Genetics (6 cfu) – prof.ssa Serena Aceto

(II anno – I semestre)

- ♦ Genetics and Conservation: an introduction.
- ♦ Phenotype and genotype variation in natural populations.
- ♦ Allele, genotype and phenotype frequency.
- ♦ Measures of genetic diversity: Observed and expected heterozygosity; nucleotide diversity; mean mismatch.
- ♦ The Hardy-Weinberg principle (autosomal and X-linked, biallelic and multi-allelic single locus).
- ♦ Multiple loci analysis: linkage equilibrium and disequilibrium.
- ♦ Random genetic drift.
- ♦ Inbreeding, gene flow and population structure.
- ♦ Mutation and natural selection.
- ♦ Interactions among genetic drift, migration, mutation and natural selection.
- ♦ Complex traits, QTL analysis and Marker Assisted Selection.