Title:	**Molecular population genetics**
Lecture hours:	15
Study period: (summer/winter)	Winter or summer
Number of credits:	4 ECTS
Assessment methods:	Written exam
Language of instruction:	English
Prerequisites:	General knowledge on principles of genetics and statistics
Course content:	Genetic and phenotypic variation Hardy-Weinberg Equilibrium Genetic linkage and population genetics Random genetic drift Mating system, inbreeding, gene flow Molecular markers and population genetics Genetic differentiation Population genetics of human populations. Principles of population genomics
Learning outcomes:	Knowledge on principles and mechanisms determining the levels and distribution of genetic variation. Ability to test basic hypotheses on population genetic equilibria (Hardy-Weinber, linkage). Understanding of meaning and practical application of the term 'effective population size'. Knowledge on genetic markers applicable to population genetic studies.
Name of lecturer:	Dr. Magdalena Trojankiewicz Dr. Bartosz Ulaszewski (on sabbatical leave from 02-2025 till 02-2026)
Contact (email address):	trojankiewicz@ukw.edu.pl
Literature:	Hartl, D. L., & Clark, A. G. (2007). Principles of Population Genetics (Sinauer, Sunderland, MA).