**Course name:** Introduction to bio-statistics  
**Credits:** 5 ECTS

**Class type:** On-line lectures + individual practice  
**Hours per week:**

**Type of the exam:** Project work

**Prerequisites** (if exist): basic biochemistry and molecular biology

**Course description:** An application oriented course focusing on how statistical methods can be used to address common problems in the analysis of results from molecular biology experiments.  
- Comparing simple groups: hypothesis testing
- Multiple groups: ANOVA and related concepts
- Hypothesis testing in complex experimental settings: Randomized complete block design
- Dose and response: regression models
- Handling low sample sizes with General Linear Models
- Planning optimal sample sizes: how many animal do I need?

**Recommended reading:**  

**Lecturer (name, position, degree):** Sándor Pongor, full professor, DSc

**Additional lecturers,** if exist: