UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Application of Next Generation Sequencing and bioinformatics tools to ecological studies (Curricular Environment)

2223-94R-SCGA35

Title

Application of Next Generation Sequencing and bioinformatics tools to ecological studies

Teacher(s)

Andrea Franzetti ; Isabella Gandolfi

Language

English

Short description

The course is a methodological introduction to amplicon-based surveys using Next Generation Sequencing (NGS) platforms. When applied to environmental samples, such surveys can represent a powerful tool for taxonomic and functional studies tool in ecological disciplines.

Detailed contents:

1) theoretical introduction;

2) DNA extraction from environmental matrices and preparation of amplicon libraries for NGS;

3) sequence analysis from NGS through bioinformatics tools (Bio-Linux environment).

Evaluation: NO

CFU / Hours

1,5 CFU - 16 Hours (4h lecture, 4h lab work, 8h bioinformatics lab work)

Teaching period

II semester