UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Next Generation Sequencing and Bioinformatic Tools for Ecological Studies

2526-1-124R036

Title

Next Generation Sequencing and bioinformatics tools for 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).

A final evaluation of the course is expected

CFU / Hours

2 CFU - 20 Hours (8h Lecture, 12 Laboratory training)

Teaching period

II semester

Sustainable Development Goals