



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Next Generation Sequencing and Bioinformatic Tools for Ecological Studies

2425-1-124R036

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#### 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).

Evaluation: NO

### **CFU / Hours**

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

### **Teaching period**

II semester

### **Sustainable Development Goals**

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