

## UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### SYLLABUS DEL CORSO

# Next Generation Sequencing and Bioinformatic Tools for Ecological Studies

2324-1-124R036

Titolo

Next Generation Sequencing and bioinformatics tools for ecological studies

Docente(i)

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Lingua

English

#### **Breve descrizione**

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 / Ore

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

#### Periodo di erogazione

II semester: June 2024

#### **Sustainable Development Goals**