



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

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

2223-94R-SCGA35

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#### **Titolo**

Application of Next Generation Sequencing and bioinformatics tools to ecological studies

#### **Docente(i)**

Andrea Franzetti ; Isabella Gandolfi

#### **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**

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

**Periodo di erogazione**

Il semester

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