

Syllabus 2022/23

Teacher (name and affiliation)	Andrea Franzetti (UNIMIB, Dept. of Earth and Environmental Sciences) Isabella Gandolfi (UNIMIB, Dept. of Earth and Environmental Sciences)
Title	Application of Next Generation Sequencing and bioinformatics tools to ecological studies
Language	<i>English</i>
CFU	<i>1,5 (0,5 CFU lesson, 1 CFU lab work)</i>
Hours	<i>16 (4 lessons, 4 lab work, 8 bioinformatics lab work)</i>
Program	<p><i>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.</i></p> <p><i>Detailed contents:</i></p> <ol style="list-style-type: none"> <i>1) theoretical introduction;</i> <i>2) DNA extraction from environmental matrices and preparation of amplicon libraries for NGS;</i> <i>3) sequence analysis from NGS through bioinformatics tools (Bio-Linux environment).</i>
Evaluation: YES/NO	<i>NO</i>
Calendar	<i>II semester</i>