

Microbial Omics

Course Workload		Assessment form (examination/ graded test/ ungraded test)
ECTS	Hours	
4	144	Exam

The course allows to acquire basic skills in the systems biological analysis of microbial communities and develop an understanding of the methods for studying these data.

Course structure:

1. Metagenomics

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- 1.1. Amplicon metagenomics
 - 1.2. Shotgun metagenomics
 - 1.3. Genome-resolved metagenomics
 - 1.4. Metagenomic assembly

2. Phylogenomics

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- 2.1. Phylogenetics
 - 2.2. Phylogenomics
 - 2.3. Phylogenomics and pangenomics

3. Pangenomics

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- 3.1. Pangenomics
 - 3.2. Metapangenomics
 - 3.3. Horizontal gene transfer

4. Bacterial population genetics

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- 4.1. Bacterial populations
 - 4.2. Single-cell genomics
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