

ENV-722

Microbial diversity (2019)

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Cursus	Sem.	Type
Civil & Environmental Engineering		Obl.

Language of teaching	English
Credits	2
Session	
Exam	Multiple
Workload	60h
Hours	16
Exercises	16
Number of positions	15

Frequency

Every 2 years

Remark

Every two years/ Next time: Fall 2018

Summary

Microbes are ubiquitous in the environment and in animal hosts but their activity and role are often not well known. This course presents the latest scientific insights into microbial phylogenetic and functional diversity and its impact on natural and engineered environments and on eukaryotic hosts.

Content

All such questions will be discussed and studied in this tutorial on the basis of the most recent literature, with a strong focus on specific molecular methods to unravel complex microbial communities. We will likely chose four different microbial ecosystems: human microbiome (mostly intestinal tract), insect gut, wastewater treatment plant and anaerobic digesters or the deep ocean. The course will be structured as a meeting in which each student and the instructor will be prepared to discuss the same publication for 2 hours.

Keywords

microbial diversity, functional diversity, metabolic diversity, microbial ecology, DNA-based methods, RNA-based methods,

Learning Prerequisites**Required courses**

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