BIO-373

Genetics and genomics

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Cursus	Sem.	Type
Life Sciences Engineering	BA5	Opt.
Statistics	MA1, MA3	Opt.

Language of teaching	English
Credits	4
Session	Winter
Semester	Fall
Exam	Written
Workload	120h
Weeks	14
Hours	**4 weekly**
Lecture	2 weekly
Exercises	1 weekly
Project	1 weekly
Number of positions	

Summary

The theoretical part of this course covers classical genetics and contemporary genomics. Because bioinformatics has become important for genomic research, the course also includes practical applications to genomic analyses using Python, including group projects.

Learning Outcomes

By the end of the course, the student must be able to:

- Perform basic genomic analyses using Python (differential expression, association study, etc.)

Expected student activities

Exercises + group project in Python

Assessment methods

Written exam + report on a project in Python

Resources

Moodle Link

- https://go.epfl.ch/BIO-373