UCLouvain

wsbim1322

2026

Bioinformatics

3.00 credits	30.0 h + 10.0 h	Q1

Teacher(s)	Gatto Laurent ;
Language :	French
Place of the course	Bruxelles Woluwe
Prerequisites	*The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.*
Learning outcomes	
Evaluation methods	The final exam will be practical and computer-based; the students will prepare a reproducible report in Rmd using RStudio answering exam questions addressing small scale data analysis task similar to those presented during the course. A student may be refused registration for the exam if they have not regularly participated in the learning activities or the various stages of the teaching program.
Teaching methods	The course will be composed of practical sessions, during which the students will implement solutions to data analysis problems using the R programming language and the RStudio development environment, and will use the unix command line. Tests will be organised on a regular basis to allow for students to assess their learning throughout the course. Course attendance to all sessions (volume 1 and 2) is mandatory.
Content	This bioinformatics course will focus on the following themes: • Improvement of R programming • Experimental designs using in omics analyses. • Omics data transformation and visualisation. • Multivariate data exploration and analysis.
Inline resources	The course material is available online: https://uclouvain-cbio.github.io/WSBIM1322/
Other infos	This course is *English friendly* : lecture notes and additionnal matieral are in English, students can ask their questions in English during the class, and questions and answers can be provided in English during the final evaluation.
Faculty or entity in charge	SBIM

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Additionnal module in Biomedical Sciences	APPSBIM	3		🔍
Minor in Biomedicine (openness)	MINSBIM	3		🔍
Bachelor in Biomedicine	SBIM1BA	3	WFARM1247 AND WSBIM1207 AND LANGL1855	🔍