GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2024-2025

Introduction to Bioinformatics (C001479)

Course size *(nominal values; actual values may depend on programme)*

Credits 6.0 **Study time 165 h**

Course offerings and teaching methods in academic year 2024-2025

A (semester 2)	Dutch	Gent	lecture

Lecturers in academic year 2024-2025

Marchal, Kathleen	WE09	lecturer-in-charge
Miclotte, Giles	WE09	co-lecturer

Offered in the following programmes in 2024-2025	**crdts**	**offering**
Bachelor of Science in Mathematics	6	A

Teaching languages

Dutch

Keywords

Biological databases, sequence alignment, homology, motif detection.

Position of the course

"Introduction to bioinformatics" aims to teach students the basic computational methodologies for processing molecular biological data, in particular nucleic acid and protein sequences. Students learn the importance of bioinformatics in biological sciences.

Contents

see C003713

Initial competences

Basic knowledge of mathematics.

Final competences

1 Value bioinformatics in molecular biology.
2 Gain insight in the complexity of biological data in online biological databases.
3 See through computational methods for biological sequence data.
4 Independently apply computational methods for biological analysis of sequence data.
5 Critically assess computational results.
6 Put computational results in their biological context.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Seminar, Lecture, Independent work

Extra information on the teaching methods

Guided exercise sessions
Participation to discussion forum
Self study

Study material

Type: Slides

Name: NA
Indicative price: Free or paid by faculty
Optional: no
Number of Slides : 100
Available on Ufora : Yes
Online Available : Yes
Available in the Library : No
Available through Student Association : No

References

Course content-related study coaching

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment with open-ended questions

Examination methods in case of periodic assessment during the second examination period

Written assessment with open-ended questions

Examination methods in case of permanent assessment

Participation

Possibilities of retake in case of permanent assessment

examination during the second examination period is not possible

Extra information on the examination methods

Written examination with open questions: theory and exercises.
Closed book unless the exam takes place online

Calculation of the examination mark

The written closed book examination for 17/20; participation to the discussion forum/quizzes 3/20
In principle the use of generative AI during the exam is forbidden. However because it is impossible to check this, answers that are correct but do not use any concepts or terminology of the course will be judged anyhow incorrect. This will be told in advance to the students. The link in the answer to the lecture should be clear. If the students wishes to add more information than was told in the course, the source of the inormation should be mentioned.
see C004092

Facilities for Working Students

see C004092