Bioinformatics

Prof Francesca Cordero Prof Marco Beccuti

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Lesson time table

Cordero's lessons

Deep sequencing analysis, data interpretation, and data integration

Beccuti's lessons

Alignment and Clustering Algorithms

Time Table

)		Monday	Tuesday	Wednesd	Thursday	Friday
	09-10				_	
	10-11					
	11-12	BioInfo			BioInfo	
	12-13	BioInfo			BioInfo	
	14-15			BioInfo		
	15-16			BioInfo		
	16-17					
	17-18					

Course material

All slides, news, lesson's cancellation or changes in time table will be available at the course web site:

http://cmb.i-learn.unito.it/

Key: bioinfo18

Exam

The exam is composed by two parts: write and oral.

The **write part** is composed by ALL topics discussed during the lessons, and it will be composed mainly by open questions and exercises.

In the **oral part** the student will discuss in ten minutes one scientific paper that the student can be select from all scientific journal papers available by NCBI web site from 2010 till now. The presentation must be clear and well structured, i.e. introduction, scope of the paper, materials and methods used, main results and discussion.

The maximum score reachable from this part is 2 points.

The final score will be determined by the score reached from the write part plus the score that the student will reach during the oral part.

To access to the oral part is necessary to have passed the write part.

Course contents

Next generation Sequencing

Library prep
Computational and Statistical analysis
Application of NGS
Data visualisation
Data compendia

<u>Transcriptional Factor Binding Sites prediction</u> <u>Epigenomic: computational approaches</u>

Alignment Algorithms
Clustering and Classification Algorithms