Elements of Biophysics

(4 CFU)

Master in Bioinformatics - University of Bologna

1st Year - First Semester

Course Director: Prof. Emidio Capriotti Address: Via F. Selmi 3 - Room 104, 2nd Floor

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Week 1: October 17-23, 2022 17/10 Monday 18/10 Tuesday 19/10 Wednesday 20/10 Thursday 21/10 Friday	14:00 - 17:00 14:00 - 17:00 14:00 - 16:00 10:00 - 13:00 14:00 - 17:00
Week 2: October 24-30, 2022 24/10 Monday 25/10 Tuesday 26/10 Wednesday 27/10 Thursday 28/10 Friday	14:00 - 17:00 14:00 - 18:00 14:00 - 16:00 14:00 - 17:00 14:00 - 17:00

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Learning outcomes

At the end of the course, the student acquires the basic elements of biomolecular structure and function and the most appropriate models for their descriptions. In particular, the student acquires skills concerning: - Basic elements of cell biology; - Basic elements of structural and functional biology; - Basic notions of kinetics and thermodynamics for modelling relevant biological functions in Systems Biology.

Course contents

- Basic notions of kinetics and thermodynamics for modelling relevant biological functions in systems biology.
- Basic elements of structural and functional biology.
- Basic elements of cell biology.

Readings/Bibliography

Suggested readings, critical reviews and material online.

Teaching methods

Lectures, practicals, lab activities.

Assessment methods

The assessment will be written, based on questions and an oral section. The aim is to evaluate the student's understanding of the learning outcomes of the course, focusing on the major aspects of the biological complexity.

Teaching tools

Online