

COURSE DETAIL

INTRODUCTION TO BIOPHYSICS

Country

Denmark

Host Institution

University of Copenhagen

Program(s)

University of Copenhagen

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics Biological Sciences

UCEAP Course Number

122

UCEAP Course Suffix**UCEAP Official Title**

INTRODUCTION TO BIOPHYSICS

UCEAP Transcript Title

INTRO TO BIOPHYSICS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course provides a fundamental introduction to a wide range of modern biophysics. This is a multidisciplinary scientific area where a number of theoretical and experimental methods from physics are used to understand and examine biological systems. The course begins from the fundamental biological building blocks, including proteins, DNA/RNA, and membranes. It discusses their structure and interactions both on a molecular level and their role in large systems such as the structure of the cell, the movement of organisms and the signaling of nerves. The course describes the fundamental physical mechanisms for interaction and transport that biological organisms use, and introduces modern experimental techniques for obtaining structural and thermodynamical biophysical information at the nanoscale.

Language(s) of Instruction

English

Host Institution Course Number

NFYB21002U

Host Institution Course Title

INTRODUCTION TO BIOPHYSICS

Host Institution Course Details

<https://kurser.ku.dk/course/nfyb21002u/>

Host Institution Campus

Host Institution Faculty

Science

Host Institution Degree

Bachelor

Host Institution Department

The Niels Bohr Institute

Course Last Reviewed

2025-2026

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