

COURSE DETAIL

CLASSICAL MECHANICS AND ELECTRODYNAMICS

Country

Norway

Host Institution

University of Oslo

Program(s)

University of Oslo

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics

UCEAP Course Number

110

UCEAP Course Suffix**UCEAP Official Title**

CLASSICAL MECHANICS AND ELECTRODYNAMICS

UCEAP Transcript Title

CLASSICAL MECHANICS

UCEAP Quarter Units

8.00

UCEAP Semester Units

5.30

Course Description

This course gives an introduction to analytical mechanics and field theory, with an emphasis on Lagrange-Hamilton formalism and the action concept. Further, the course contains a thorough introduction to Einstein's special relativity using four-vector formalism. This is used to give a covariant (independent of reference frame) description of mechanics and electromagnetism, including Maxwell's equations.

Language(s) of Instruction

English

Host Institution Course Number

FYS3120

Host Institution Course Title

CLASSICAL MECHANICS AND ELECTRODYNAMICS

Host Institution Course Details

<https://www.uio.no/studier/emner/matnat/fys/FYS3120/index-eng.html>

Host Institution Campus

Host Institution Faculty

Mathematics and Natural Sciences

Host Institution Degree

Bachelor

Host Institution Department

Physics

Course Last Reviewed

2023-2024

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