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

Print