COURSE DETAIL

PRINCIPLES OF OPTICS
Country Brazil
Host Institution Pontifical Catholic University of Rio de Janeiro
Program(s) Pontifical Catholic University of Rio de Janeiro
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Physics
UCEAP Course Number 112
UCEAP Course Suffix
UCEAP Official Title PRINCIPLES OF OPTICS
UCEAP Transcript Title PRINCIPLES OPTICS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course covers reflection and refraction, polarization, plane and spherical mirrors, thin lenses, and optical instruments. It also examines interference phenomena—including Young's experiment, thin films, and interferometers—as well as diffraction from single slits, circular apertures, double and multiple slits, and diffraction gratings. Additional topics include lasers and optical fibers. Prerequisites: Electromagnetism and Physics III.

Language(s) of Instruction
Portuguese

Host Institution Course Number
FIS4004

Host Institution Course Title
PRINCÍPIOS DE ÓPTICA

Host Institution Course Details
https://www.puc-rio.br/ferramentas/ementas/ementa.aspx?cd=FIS4004

Host Institution Campus
PUC-Rio

Host Institution Faculty

Host Institution Degree

Host Institution Department
Physics

Course Last Reviewed
2025-2026

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