

COURSE DETAIL

PARTICLE PHYSICS

Country

United Kingdom - England

Host Institution

University of London, Royal Holloway

Program(s)

University of London, Royal Holloway

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics

UCEAP Course Number

109

UCEAP Course Suffix**UCEAP Official Title**

PARTICLE PHYSICS

UCEAP Transcript Title

PARTICLE PHYSICS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course covers energy loss processes, particle detectors, accelerators, spin-off applications. Strange particles, quantum numbers, the simple quark model. Heavy quarks. Leptons and lepton number. Electroweak unification, W and Z bosons, the Higgs mechanism, QCD. Extended topics selected from: deep inelastic scattering, supersymmetry, beyond the Standard Model, dark matter, Neutrino oscillations, and applications to industry and medicine.

Language(s) of Instruction

English

Host Institution Course Number

PH3520V

Host Institution Course Title

PARTICLE PHYSICS

Host Institution Campus

Royal Holloway

Host Institution Faculty

Host Institution Degree

Host Institution Department

Physics

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