

COURSE DETAIL

FUNDAMENTALS OF PHYSICS II

Country

Singapore

Host Institution

National University of Singapore

Program(s)

National University of Singapore

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Physics

UCEAP Course Number

16

UCEAP Course Suffix

B

UCEAP Official Title

FUNDAMENTALS OF PHYSICS II

UCEAP Transcript Title

PHYSICS II

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course examines the three branches of physics: electricity and magnetism; optics; and modern physics. Topics covered include electricity and magnetism: Coulombs law, electric field and potential, capacitance, current and resistance, DC circuits, magnetic fields, magnetic effects on current, electromagnetic induction, AC circuits and electromagnetic waves; optics: reflection and refraction, systems of lenses, optical instruments, interference, diffraction, grating and polarization; and modern physics: blackbody radiation, photoelectric effect, atomic transitions and spectra, the uncertainty principle, wave-particle duality, radioactivity and decay processes, binding energy and fusion energy, and fusion and fission.

Language(s) of Instruction

English

Host Institution Course Number

PC1222

Host Institution Course Title

FUNDAMENTALS OF PHYSICS II

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Physics

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