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 Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Physics

Course Last Reviewed

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