

# COURSE DETAIL

## GENERAL PHYSICS 1 WITH CALCULUS

**Country**

Hong Kong

**Host Institution**

Hong Kong University of Science and Technology (HKUST)

**Program(s)**

Hong Kong Summer, HKUST

**UCEAP Course Level**

Lower Division

**UCEAP Subject Area(s)**

Physics

**UCEAP Course Number**

11

**UCEAP Course Suffix**

S

**UCEAP Official Title**

GENERAL PHYSICS 1 WITH CALCULUS

**UCEAP Transcript Title**

PHYSICS I

**UCEAP Quarter Units**

4.50

**UCEAP Semester Units**

3.00

### **Course Description**

This course introduces general topics in physics employing a calculus-based approach. Key course topics include: motions and Newton's laws, work and energy, conservation of energy and momentum, rotation, rigid body, simple harmonic and damped oscillations, forced oscillations, standing waves and sound waves, kinetic theory and the laws of thermodynamics. Prerequisite: single-variable calculus. Text: Young and Freedman, UNIVERSITY PHYSICS. Assessment: homework (10%), quizzes (40%), final exam (50%)

### **Language(s) of Instruction**

English

### **Host Institution Course Number**

PHYS1112

### **Host Institution Course Title**

GENERAL PHYSICS 1 WITH CALCULUS

### **Host Institution Course Details**

### **Host Institution Campus**

HKUST International Summer School

### **Host Institution Faculty**

### **Host Institution Degree**

### **Host Institution Department**

Science

### **Course Last Reviewed**

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