

COURSE DETAIL

INTRODUCTION TO PHYSICS

Country

Japan

Host Institution

Tohoku University

Program(s)

Engineering and Science

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Physics

UCEAP Course Number

30

UCEAP Course Suffix**UCEAP Official Title**

INTRODUCTION TO PHYSICS

UCEAP Transcript Title

INTRO PHYSICS

UCEAP Quarter Units

3.00

UCEAP Semester Units

2.00

Course Description

This course is intended for students without any or little background in physics and calculus. Important concepts in physics such as force, momentum, energy, angular momentum, and laws of conservation are introduced through Newtonian mechanics. In addition, these concepts are described in the language of mathematical equations, specifically through calculus.

The course aims to teach Newton's laws of motion, momentum, and energy, and angular momentum as well as their conservation properties. In addition, students will be expected to be able to draw a free-body diagram, derive an equation of motion, and solve it using simple vector algebra and calculus.

Language(s) of Instruction

English

Host Institution Course Number

N/A

Host Institution Course Title

INTRODUCTION TO PHYSICS

Host Institution Campus

Tohoku University

Host Institution Faculty

Host Institution Degree

Host Institution Department

Collegewide

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