

# 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**

PHYSICS A: INTRODUCTORY PHYSICS

### **Host Institution Course Details**

[https://gkms3.bureau.tohoku.ac.jp/sa\\_qj/slbssbdr.do?value%28risyunen%29=2023&va...](https://gkms3.bureau.tohoku.ac.jp/sa_qj/slbssbdr.do?value%28risyunen%29=2023&va...)

### **Host Institution Campus**

Tohoku University

### **Host Institution Faculty**

### **Host Institution Degree**

### **Host Institution Department**

Collegewide

### **Course Last Reviewed**

2023-2024

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