## **COURSE DETAIL**

# **MATERIAL SCIENCE Country** Japan **Host Institution** Tohoku University Program(s) **Engineering and Science UCEAP Course Level Upper Division UCEAP Subject Area(s) Physics UCEAP Course Number** 111 **UCEAP Course Suffix UCEAP Official Title** MATERIAL SCIENCE **UCEAP Transcript Title** MATERIAL SCIENCE **UCEAP Quarter Units** 3.00 **UCEAP Semester Units** 2.00

#### **Course Description**

This class object is to study fundamental concepts of solid-state physics, such as crystal structure, reciprocal lattice, x-ray, diffraction, phonon, band dispersion, Fermi surface, magnetism, semiconductor, and superconductivity. Other topics include: categories of solids; diffraction; phonons; free electrons; periodic potential; Fermi surface; semiconductors; and superconductivity.

## Language(s) of Instruction

English

#### **Host Institution Course Number**

PHY821E

#### **Host Institution Course Title**

MATERIAL SCIENCE

#### **Host Institution Campus**

Tohoku University

## **Host Institution Faculty**

**Host Institution Degree** 

### **Host Institution Department**

JYPE

Print