

## COURSE DETAIL

### ECOLOGY AND EVOLUTION

**Country**

Japan

**Host Institution**

Tohoku University

**Program(s)**

Engineering and Science

**UCEAP Course Level**

Lower Division

**UCEAP Subject Area(s)**

Biological Sciences

**UCEAP Course Number**

52

**UCEAP Course Suffix****UCEAP Official Title**

ECOLOGY AND EVOLUTION

**UCEAP Transcript Title**

ECOLOGY&EVOLUTION

**UCEAP Quarter Units**

3.00

**UCEAP Semester Units**

2.00

## Course Description

This course studies the basics and recent advances in ecology and evolution.

The course covers the following topics: global change and plants; biogeography and global biodiversity patterns; animal group and social behavior; plant morphological plasticity caused by biological interactions; gene and genome duplication; heterospecific mating interactions; sexual selection and sexual conflict in animals; mathematical modeling of predator-prey dynamics; eDNA analysis and its application to ecological monitoring; dynamical-data analysis in ecology; physiological ecology of plants; ecology and evolution in tumors; dendrochronology, and adaptive evolution of plants in extreme environment.

### Language(s) of Instruction

English

### Host Institution Course Number

N/A

### Host Institution Course Title

ECOLOGY AND EVOLUTION

### Host Institution Campus

Tohoku University

### Host Institution Faculty

### Host Institution Degree

### Host Institution Department

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