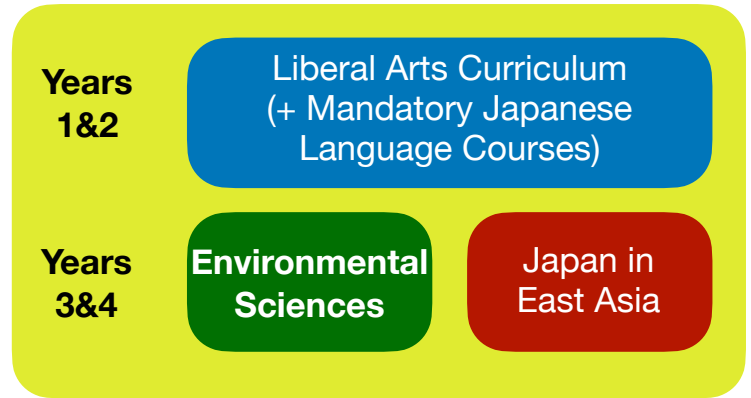


# Environmental Sciences (ES) (PEAK)

## Overview

The goal is to provide students with a broad-based, inter- and multidisciplinary understanding of Environmental Systems and Global Sciences. This is achieved by exploiting the expertise of many world experts from a large number of different disciplines, in a coherent teaching program based on six key areas. These key areas focus on both the scientific and social science aspects and details of each of them are provided below.



## Key Features of the Program

### Area 1 Environmental Principles

*Environmental Principles* highlights the philosophical and ethical aspects of environmental issues.

### Area 4 Materials Systems and Dynamics

*Materials, Systems and Dynamics* is rooted in the physical and biological sciences.

### Area 2 Management and Policy

*Management and Policy* treats social science approaches to environmental issues.

### Area 5 Energy and Resources

*Energy and Resources* is one of the most important underlying subjects in environmental science.

### Area 3 Measurement and Evaluation

*Measurement and Evaluation* examines the theoretical principles and models, experimental methods and technologies and the analytical processes necessary to evaluate these systems and their interactions.

### Area 6 Health and Security / Urban Planning Technology

This area deals with the many facets of this perspective, including risk analysis, food safety and the dynamics of populations. It discusses the ways in which the beneficial aspects of our environment can be nurtured and enhanced, and the ways in which ecological and social sustainability can be applied in the design of future urban environments.

# Environmental Sciences (ES) (PEAK)



[https://youtu.be/\\_JlbiVosCvY](https://youtu.be/_JlbiVosCvY)

## ES Senior Division: Sample Courses (subject to change every year)

- Chemistry for Environmental Studies
- Energy Technology and Natural Resources
- Sustainable Social-Ecological Systems
- Experiments in Environmental Sciences
- Food Safety and Risk Analysis
- Fieldwork and Case-studies for Environmental Sciences
- Fundamentals of Ecology
- Earth System Science
- Law and the Environment
- Statistics



Professor  
Richard Shefferson

### Fundamentals of Ecology

Fundamentals of Ecology is a course offered in the Environmental Sciences track that provides students with an overview of both the basics and the cutting edge in ecology and evolutionary biology. Students consider real-world problems, such as the current extinction crisis and global overpopulation, and learn the basic theory and scientific skills to help solve them. Students also participate in some field and lab exercises to familiarize them with how ecology is actually done by scientists.

For more information about the Environmental Sciences program, please check:  
<https://peak.c.u-tokyo.ac.jp/courses/es/index.html>