# Elective Course Description (1. Fall Semester)

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| Subject (English) | Ecology and evolution | Semester | Fall | Day/Slot | |
| 科目名 (日本語) | 生態と進化 | | | | |
| Course Code | | Course Numbering | SBI-BIO801E | Period | Oct. - Feb. |
| Instructor (Post) | K.HIKOSAKA,*et al.* （Prof） | | | Campus | |
| | | | | Building | |
| Faculty | Faculty of Science | Credits | 2 | Class Room | |

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| Class subject | Ecology and evolution |

**Object and summary of class**

This class object is to study basics and recent advances in ecology and evolution.
Lectures will be given weekly

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| Keywords | Ecology, Evolution, Adaptation, Global Change, Speciation, Environmental Responses |

**Goal of study**

The goal of this class is to obtain the background knowledge concerting ecology and evolution.

**Contents and progress schedule of class**

**-Floral ecology of plants**

**-Global change and plants**

**-An introduction of Ecological Stoichiometry**

**-Evolution**

**-Reproductive isolation of plant species**

**-Gene and genome duplication**

**-Heterospecific mating interactions**

**-Island biology**

**-Microorganisms and environments**

**-Functional ecology in plant response to environmental change**

-**Biodiversity and ecosystem services**

**-Dendrochronology**

-**Regional floras and herbaria: source of information of ecological studies**

-**Endosymbiosis and the origin of plants**

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| Preparation | Nothing special |
| Record and evaluation method | Attendance to the lectures 50%, reports 50% |
| Textbook and references | Nothing (given in each lecture) |
| Self study | Nothing special |
| In addition | |