

<b>Course number</b>	U-LAS70 10002 SE50				
<b>Course title (and course title in English)</b>	ILAS Seminar-E2 :Methods in Ecology and Natural History (生態学・自然史学の手法)		<b>Instructor's name, job title, and department of affiliation</b>	Graduate School of Science Associate Professor,BARNETT, Craig Antony	
<b>Group</b>	Seminars in Liberal Arts and Sciences		<b>Number of credits</b>	2	<b>Number of weekly time blocks</b> 1
<b>Class style</b>	seminar (Face-to-face course)	<b>Year/semesters</b>	2025・First semester		<b>Quota (Freshman)</b> 10 (10)
<b>Target year</b>	Mainly 1st year students	<b>Eligible students</b>	For all majors		<b>Days and periods</b> Mon.5
<b>Classroom</b>	26, Yoshida-South Campus Bldg. No. 1			<b>Language of instruction</b>	English
<b>Keyword</b>	野外研究 / 鳥類 / 都市環境				

#### [Overview and purpose of the course]

Field research is an essential component of ecology because without it we could not compile models and test hypotheses. In this course we will use field techniques such as point counts to obtain a data set from different parts of the urban environment in Kyoto make comparisons among them in order to understand what species live in these different areas and how the environment can be related to their natural history. Students will work in teams and collect data and then data will be pooled and analyzed in class. Students will work as teams for their presentations, but will submit their own written report.

#### [Course objectives]

- 1) Learn to identify birds in Kyoto and surrounding areas
- 2) Learn how to conduct a scientific experiment
- 3) Learn some facets of avian natural history
- 4) Data analysis and presentation
- 5) How to write a scientific report in English using the data we collected

#### [Course schedule and contents]

- 1) Course introduction, designing an experiment
- 2) How to design a field experiment.
- 3) Identifying birds
- 4) Identifying birds
- 5) Collecting data
- 6) Collecting data
- 7) Collecting data
- 8) Collecting data
- 9) Collation and data exploration
- 10) Data analysis
- 11) Writing an abstract and introduction
- 12) Methods and results
- 13) Discussion and conclusions
- 14) Peer review

15) Group presentations

16) Feedback

### **[Course requirements]**

Understanding of high school biology is recommended.

### **[Evaluation methods and policy]**

Assessment will comprise of participation in data collection and either preparation of final report or in-class presentation.

### **[Textbooks]**

Reading materials distributed during classes.

### **[References, etc.]**

( **References, etc.** )

C. J. Bibby, N. D. Burgess, D. A. Hill, and S. H. Mustoe 『Bird Census Techniques 2nd Edition』 ( Academic Press )

W. J. Sutherland, I Newton, and R. E. Green 『Bird Ecology and Conservation: A Handbook of Techniques』 ( Oxford University Press )

M. Brazil 『Birds of East Asia』 ( Princeton University Press )

### **[Study outside of class (preparation and review)]**

To achieve the course goals students should review the course materials plus optionally the recommended readings after each class. The time necessary for review should be in the range of 2-3 hours per class.

### **[Other information (office hours, etc.)]**

Take out accident insurance. ( Personal Accident Insurance for Students Pursuing Education and Research (Gakkensai) )

### **[Essential courses]**