Course number U-LAS14 20054 LE68												
Course title (and course title in English)			o Ecology-! o Ecology-!	E2 Instructor's name, job title, E2 and department of affiliation			Graduate School of Science Associate Professor, BARNETT, Craig Antony					
Group	Froup Natural Sciences				Field(Classification)			Biology(Issues)				
Language of instruction English					Old group Group B				Number of credits		2	
Number of weekly time block	s 1	1 Class sty		le Lecture (Face-to-fac		ace cou	course)		ar/semesters	2025 • First semester		
Days and periods	Mo	Mon.2		Target year Mainly 1		inly 1st &	k 2nd year students E		gible students	For all	For all majors	
[Overview and purpose of the course]												
question of how individual organisms handle the difficulties of their environment. We will start with the scale of ecological organization, from looking at individuals to populations, communities, ecosystems, and global and conservation ecology. Beyond description, we will focus on simple but elegant mathematical models that explain patterns we see in the world and processes that may produce them.												
[Course objectives]												
 To understand the principles of how organisms respond to your environments, populations grow and go extinct, species interact through food webs and mutualisms, communities are structured, and ecosystems work as systems, cycling nutrients and energy. To learn about the environmental challenges that we will encounter in the coming century, and how ecological principles inform our solutions to mitigate and adapt to them. To be able to describe the ideas behind mathematical ecological theories using graphs, and to appreciate their predictions and assumptions. To sharpen listening skills, and interact in a classroom setting in English. 												
[Course schedule and contents)]												
 Introduce Evolution Evolution Behavion Populati Populati Competition Competition Competition Predator Predator Other Signa Predator Other Signa Other Signa Specie Applie Applie Energy Landson Final Final Final Feedba 	tion: T in and I ural Ec on Dist on Dyn ition ient: An is and H pecies I s Diver d Probl d Probl d Probl and N cape and Exam	he Sciend Ecology ology ribution, amics nalysis of Ierbivore nteractio sity em: Harv em: Cons utrient C d Global	xe of Ecolo Abundance f Ecologica s ns vesting Pop servation ycles Ecology	gy e, Grov l Data	wth, and	Regul	ation					

Introduction to Ecology-E2(2)

[Course requirements]

Understanding of high school biology is recommended.

[Evaluation methods and policy]

Assessment will comprise of assignments (50%), and a final examination (50%). The final examination will test whether students have achieved the course goals. Students who are absent more than five times will not be credited.

[Textbooks]

Not fixed

[References, etc.]

(References, etc.)

Krebs, C.J. ^CEcology: The experimental Analysis of Distribution and Abundance (Pearson) ISBN:978-1-29202-627-5

[Study outside of class (preparation and review)]

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

[Other information (office hours, etc.)]

[Essential courses]