Course nu	U-LAS14 20022 LE68												
	Animal Behavior-E2 Animal Behavior-E2					nam and	Instructor's name, job title, and department of affiliation			Wildlife Research Center Associate Professor, Andrew MacIntosh			
Group Na	atural Sciences					Field(Classification)				Biology(Issues)			
Language of instruction	sh			Ole	Old group G		Group B		Number of credits		2		
Number of weekly time blocks			Ciass style		Lecture (Face-to	cture ace-to-face course)			Year/semesters		2024 • First semester		
Days and periods	Mon.5			Target year		All stu	All students		Eligible students		For science students		

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

Why do animals do as they do? Why do we humans do as we do? This course is aimed at answering these questions from the perspective of Darwinian evolution. Using 'Tinbergen's 4 questions', this course leads students to discover what lies at the root of the diversity of animal behavior that we observe today, how we study the mechanisms and functions of behavior, and why studying animals has a lot to teach us about the evolution of behavior in humans.

# [Course objectives]

In this course, students will learn to:

- apply the scientific method to questions about animal behavior and avoid applying humanistic (anthropomorphic) explanations for what they observe
- understand comparative data and use it to better answer specific questions about the natural world
- understand that animal (including human) behavior, like all products of biology, is shaped by evolution

# [Course schedule and contents)]

This course will follow the schedule as follows. In principle, each topic within each part reflects one class, but the order and spacing of topics may be moved depending on the flow of the course or the occurrence of specific events related to the course material.

\*Note that there will be a midterm exam held during the 7th or 8th week of class, depending on course progress and suitability. Details will be announced well inadvance during class and on PandA.

- 1. introducing animal behavior
- 2. understanding animal behavior through 4 questions
- 3. the 'who, what, when, where and why' of behavior
- 4. neurobiology and endocrinology of behavior
- 5.'nature via nurture' behavioral genetics
- 6. animal learning
- 7. animal cognition
- 8. midterm exam
- 9. communication and signaling
- 10. 'where are we going?' movement & navigation
- 11. 'eat or be eaten' foraging & self-defense
- 12. sex & mating systems

**Continue to Animal Behavior-E2(2)** 

### Animal Behavior-E2(2)

- 13. parental investment
- 14. social behavior & social systems
- 15. Feedback

\*\*Note that students will also be expected to get some hands-onpractical training observing and recording animal behaviorusing Live Cams set up in wildlife areas or zoologicalparks. Details will be announced and discussed in classand via PandA. Students will be able to apply what they learn in thecourse and get some practice observing animals, collectingscientific data and producing simple reports.

## [Course requirements]

None

# [Evaluation methods and policy]

- 25% midterm exam
- 25% final exam
- 10% course quizzes
- 20% term paper
- 10% LiveCam practicaltraining
- 10% discussionparticipation

#### [Textbooks]

Michael D. Breed and Janice Moore (2016) Animal Behavior, 2nd Edition (Elsevier) ISBN:978-0128015322 (can be ordered via the University Coop, Amazon Japan and the publisher's website)

### [References, etc.]

#### ( References, etc. )

students are provided with information to access any additional readings related to course material

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

Studentsare expected to keep up with class readings in thetextbook throughout the semester. There will be a smallamount of additional readings provided when appropriate. Students should also expect to spend some time observing animals via live cameras online as part of the course activities, and to review course materials weekly inpreparation for the weekly quizzes at the start of each lecture. For the term paper, students are expected to conduct literature research and write a report, as well as review a small number of reports from fellow classmates aspart of the assignment.

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

There areno in-person office hours for this class, but theinstructor will set up discussion forums on the PandAworksite for this course. In addition to being a goodplace to get in touch with your instructor, students arealso expected to join the discussion, post comments andquestions, respond to instructor and student comments, etc., as part of their course grade. Details will be discussed in class and on PandA.