Study Programme: BSc Biology, BSc Ecology

Course Unit Title: Animal Behavior

Course Unit Code: OBE022

Name of Lecturer(s): Borislav Čabrilo

Type and Level of Studies: Undergraduate studies

Course Status (compulsory/elective): elective

Semester (winter/summer): summer Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: 6

Prerequisites: none

Course Aims:

The main aim of this course is to create a strong foundation of knowledge on a wide scope of animal behavior topics. Once familiar with the breadth of the subject matter, the students should be able to direct their full attention to areas they find most interesting, should they wish to become active researchers in these areas.

Learning Outcomes:

The mission statement is to produce broad understanding which can then be applied to specific cases. Rather than memorizing examples, students will learn to use them as a means to an end, connecting and integrating them to arrive at core principles. Upon completion of this course, students will be able to use these principles to explain behaviors they were previously unfamiliar with.

Syllabus:

Theory

Animal behavior as a field of study. Genetic and developmental basis of behavior. Physiological basis of behavior. Individual learning. Social learning. Foraging behavior. Antipredator behavior. Kinship and parental care. Cooperation. Communication. Reproductive behavior.

Practice

Behavioral enrichment. Heritability analysis in behavioral studies. Sensory illusions. Cross-fostering experiments. Social learning strategies. Mathematical modeling in behavioral studies. Hypothesis testing in behavioral studies. Phylogenetic analyses in behavioral studies. Game theory in behavioral studies. Human-animal communication. Comparative analyses in behavioral studies.

Required Reading:

Čabrilo B. 2020. Animal behavior. Authorized course book.

Additional Reading:

Barnard C. 2004. Animal behaviour: mechanism, development, function and evolution. Pearson Education Ltd. Dugatkin LA. 2020. Principles of animal behavior. 4th edition. The University of Chicago Press.

Rubenstein D, Alcock J. 2018. Animal behavior. 11th edition. Sinauer Associates Inc.

Weekly Contact Hours: Lectures: 2 Practical work: 1

Teaching Methods:

A 60–80-minute lecture supported by a presentation covers the main topic of the unit, relying on numerous examples to illustrate the core concepts and ideas. The students are engaged during the lecture with questions related to the content. Each lecture is followed by a short practical connection segment that takes different forms depending on the unit, either highlighting and providing an outline of a specific method/approach to behavioral studies or serving as a discussion on a particularly interesting aspect of the topic. This segment may involve problem solving, answering questions, or engaging in an exchange of ideas depending on the unit.

Assessment (maximum of 100 points)Pre-exam obligationspointsFinal exampointsResearch paper on a selected or given topic15Final written exam70Research paper presentation15