	Universitas Negeri Surabaya **Faculty of Mathematics and Natural Sciences** **Biology Undergraduate Study Program**	**Document Code**

SEMESTER LEARNING PLAN						

Courses		**CODE**		**Course Family**		**Credit Weight**				**SEMESTER**	**Compilation Date**
Ethology*		4620102063				**T=2**	**P=0**	**ECTS=3.18**		6	July 17, 2024

AUTHORIZATION	**SP Developer**	**Course Cluster Coordinator**	**Study Program Coordinator**
	....	....	Dr. H. Sunu Kuntjoro, S.Si., M.Si.

Learning model	**Project Based Learning**

Program Learning Outcomes (PLO)	**PLO study program that is charged to the course**
	Program Objectives (PO)
	PLO-PO Matrix

	P.O

PO Matrix at the end of each learning stage (Sub-PO)

P.O	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Short Course Description	In this course, animal behavior is discussed which includes understanding behavior, behavioral development, physiological aspects of behavior, innate behavior, learned behavior and social animal behavior in animals which includes adaptive behavior in groups, mating behavior, navigation, migration, communication and social organization of animals. , as well as compiling research proposals on animal behavior. This course is presented through learning with discussions, assignments to make videos of animal behavior and preparation of research proposals, as well as presentations.

References	**Main :**
	1.
	1. Gundevia, H.S. and Singh, H.G. 1996. *Animal Behavior* . New Delhi: Ram Nagar, S. Chand, Company Ltd. 2. Hopson, J.L. and Wessel, N.H. 1990. *Essential of Biology* . New York: Mc Graw – Hill. 3. Kuswanti, N., Kuntjoro, S., Ambarwati, R., and Purnomo, T. 2014. Cage Temperature in Relation to The Width of Beak Opening of Gelatik Jawa (*Padda oryzivora*) . *Proceeding of International Conference on Research, Implementation and Education of Mathematics and Sciences 2014, Yogyakarta State University, 18-20 May 2014.* *4.* Manning A. and Dawkins, M.S. 1992. *An Introduction to Animal Behavior* . Cambridge: University Press.
	Supporters:

Supporting lecturer	Dr. Nur Kuswanti, M.Sc.St. Dr. Raharjo, M.Si. Dr. Nur Ducha, S.Si., M.Si. Erlix Rakhmad Purnama, S.Si., M.Si.

Week-	**Final abilities of each learning stage (Sub-PO)**	**Evaluation**		**Help Learning, Learning methods, Student Assignments, [Estimated time]**		**Learning materials [References]**	**Assessment Weight (%)**
		Indicator	**Criteria & Form**	**Offline (offline)**	**Online (online)**		
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**

1	Understand the development of ethology	1. Explain the meaning of animal behavior 2. Explain the meaning of ethology and its development 3. Identify examples of animal behavior 4. List the aspects involved in animal behavior 5. Explain how researchers work in the field of ethology 6. Prepare a research proposal on animal behavior	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Classical questions and answers and discussions Group discussions Assignments to record animal behavior around students. Assignment to prepare research proposals on animal behavior in groups to be submitted at the final meeting (16th) 2 X 50				0%
2	Understand the physiological aspects of behavior	1. Explain the involvement of various stimuli in animal behavior	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Classical questions and answers and discussions Group discussion Presentation 2 X 50				0%
3	Understand the physiological aspects of animal behavior	1. Explain the involvement of nerves in animal behavior. 2. Explain the involvement of muscles in animal behavior	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Question and answer, classic discussion Group discussion Presentation 2 X 50				0%
4	Understand the physiological aspects of behavior	1. Explain the involvement of hormones in animal behavior. 2. Explain the role of genes in animal behavior	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Classical questions and answers and discussions Group discussion Presentation 2 X 50				0%
5	Understand the relationship between genetics, environment and behavior	1. Explain variations in behavior 2. Explain the development of behavior 3. Explain the flexibility of behavior 4. Explain the transmission of heredity (instinct, imprinting)	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Classical questions and answers and discussions Group discussion 2 X 50				0%
6	Distinguish between proximate and ultimate behavior	1. Identify proximate behavior 2. Identify ultimate behavior	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Video observation Group discussions and presentations 2 X 50				0%
7	Understanding innate behavior.	1. Explain innate behavior	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Observations, questions and answers, and discussions. 2 X 50				0%

			Criteria					
8	Understanding innate behavior (cont.)	Explains innate behavior	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Observations, questions and answers, and discussions. 2 X 50				0%
9	U.S.S			2 X 50				0%
10	Understanding learned behavior	1. Differentiate between types of learned behavior (associative learning & nonassociative learning)	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Discussion and presentation 2 X 50				0%
11	1. Explain habituation in animals. 2. Demonstrate learning problem solving in animals.	1. Explain habituation in animals. 2. Demonstrate learning problem solving in animals.	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Discussion and presentation 2 X 50				0%
12	Identify various types of behavior	Identify various types of behavior in animals.	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Classical questions and answers and discussions. 2 X 50				0%
13	Identifying various types of behavior (cont.)	Identify various types of behavior in animals.	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Classical questions and answers and discussions. 2 X 50				0%
14	Understanding behavioral ecology	1. Explain behavioral ecology 2. Explain various types of animal behavior in relation to ecology.	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Classical questions and answers and discussions. 2 X 50				0%
15	Understand the role of ethology in various fields.	Explain the role of ethology in various fields.	**Criteria:** 1. Reports and task products weigh 30% 2. USS results weighted 20% 3. USS results weigh 30% 4. Participation/activity in learning 20%	Presentation and discussion 2 X 50				0%
16								0%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
		0%

Notes

1. **Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
2. **The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
3. **Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
4. **Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
5. **Indicators for assessing** ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
6. **Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
7. **Forms of assessment:** test and non-test.
8. **Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
9. **Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
12. TM=Face to face, PT=Structured assignments, BM=Independent study.