Behavioral Biology

Module name		***Behavioral Biology***
Module level		3rd year of Bachelor program
Abbreviation, if applicable		
Sub-heading, if applicable		
Courses included in the module, if applicable		BI-3201 Behavioral Biology
Semester/term		6th Semester
Module coordinator(s)		Prof. Tati Subahar
Lecturer(s)		Dr. Lulu Lusianti Fitri Dr. Achmad Sjarmidi
Language		Indonesian
Classification within the Curriculum		Compulsory courses for Bachelor Program in Biology
Teaching format/ class hours per week during the semester		*2 parallel classes consists of 40 students / class:* *Lecture (Face to face lecture & student presentation): 50%* • Lecture : 2 x 120 minutes x 14 weeks (120 minutes x 14 = 28 hours) • Assignment : Student class presentation/group (4-5 students/group) : 2 hours/semester • Examination :1 Midterm Exam, 1 Final Exam *Practical class : 50%* • Practical class : 2 classes x 180 minutes x 12 weeks (3 hours x 12 = 36 hours) • Field course : 2 classes x 12 hours x 3 days (12 hours x 3 = 36 hours) • Examination : 1 Midterm Exam, 1 Final Exam
Workload	Total Workload	208 hours; 4(2) CU

	Face to face teaching	Assignment/ homework	Independent study	Exam	Total
Lecture	28	32	32	4	96
Practical/Field class	36	36	36	4	112
Total					208

Credit points	Behavioural Biology *(4(2) CU)*
Requirements	*Fundamental Biology; Basic sciences (Math, Physics, Chemistry)*, Animal Anatomy and Physiology, Project in Animal Anatomy and Physiology, Animal Development, Genetics, Ecology, Evolution

Content

1. History, level of organistaion and approach in studying animal behavior
2. Methodes and techniques in observing and measuring animal behavior
3. Animal behavior mechanisms through Nervous system and Endocrine system
4. Environmental cues and organisation of biological clock of animal behavior
5. Animal cognition, learning and communication
6. Animal orientation and migration
7. Sexual selection strategis and parental investment
8. Social behavior of animal
9. Animal behavior application and specialization

Learning goals/ competencies

After completion of this module, students are expected to be able to:

Knowledge *:*

- Engage with the essential facts, major concepts, theories and interdisciplinary approach of animal behaviour relating to conditions in the laboratory, domestics and natural habitat.
- Describe and demonstrate the skill necessary by using the commonly methods and statistics in the study of animal behaviour and understand to apply scientific methodology to conduct observation and research
- Show an appreciation to develop both analytical and practical skills required for working in the animal industry and conservation.

Skill:

(a) Cognitive Skills:

- Comprehend the major concepts and appraise the evidence for various explanation of comparative animal behaviour
- Appreciate current information from scientific literature and develop critical thinking in explaining animal behaviour issues

(b) Practical Skills:

- Observe and derive adaptive explanations through interdisciplinary approach for animal behaviour studies
- Competence to develop an appropriate experimental design or investigation the animal behaviour under different conditions (laboratory, domestication and field) within the constraints of time and availability of resources
- Competence in handling animal and know-how of using commonly used methods and techniques in the laboratory and field
- Competence to analyse and interpret the results obtained from observing the animal behaviour in order to reach appropriate conclusions

Competence:

- Appreciate group working and open discussion and competence to present the results obtained in animal behaviour scientifically both writing and verbally
- Appreciate comparative and interdisciplinary approach of animal behavior observation and research

Study/exam achievements

Lecture (66%); Practical class (34%)

	Midterm exam I	*Final exam*	*Assignments*	*Quizzes*	*Student class presentation*	*Total*
Lecture	*25%*	*25%*	*25%*	*10%*		*100%*
Practical class/ Field course	*25%*	*25%*	*25%*	*10%*	*15%*	*100%*

Forms of media	*Classical teaching tools:*	*white board/ chalk and talk, animation, movie, power point, practical class, field course*
	Integrated teaching tools:	-
	Digital teaching tools:	-
	Problem based teaching tools:	-

Literature

5. Goodenough, J., McGuire, B. & Jakob, E. 2009. Perspective on Animal Behaviour. John Wiley & Sons, Ltd. Chicester
6. Lehner, P. N. 1996. Handbook of Ethological Methods. 2nd. Ed. Cambridge Univ. Press, Cambridge.
7. Martin, P. & Bateson, P. 2007. Measuring Behaviour. 3rd Ed. Cambridge Univ. Press, Cambridge.
8. Relevant scientific journals