



THE MODULE HANDBOOK

FACULTY OF BIOLOGY

Animal Anatomy

Module code	BIO 30702
Module level	2 nd year of Undergraduate Program in Biology
Abbreviation, if applicable	-
Sub-heading, if applicable	-
Courses included in the module, if applicable	-
Semester/term	Odd
Module coordinator(s)	Dr. Susilo Hadi, M.Si.
Lecture(s)	<ol style="list-style-type: none">1. Dr. Susilo Hadi, M.Si.2. Drs. Johanes Sugiyanto, M.S.3. Zuliyati Rohmah, M.Si., Ph.D.4. Luthfi Nurhidayat, S.Si., M.Sc.
Language	Indonesia
Classification within the Curriculum	Elective course
Teaching format/class hours per week during the semester	<p>This course is organized in 1 class and planned to have 13 to 14 teaching weeks and 2- 3 weeks of examination for teaching session. The Teaching session is scheduled on Wednesday at 10-12 am. The classroom used for this course is determined by the head of study program and can be changeable every semester due to classromm availability.</p> <p>Laboratory session is designed in a laboratory class with maximum 30 students. The number of the class can be adjusted if the class members are more than 30 students. The laboratory session is held in Animal Structure and Development Laboratory. It is scheduled once a week, every Tuesday and/or Wednesday at 1-4 pm. The student have to follow 8 weeks of laboratory session which is divided into 4 weeks of laboratory work, 2 weeks of mini research projects, 1 week of mini research presentation, and 1 week of laboratory final exam.</p>
Workload	Estimated working hour: 10,5 hours/week.
Credit points	2-1 credits
Requirements	Animal Structure and Development (BIO 20701)
Learning goals/ competencies	This course supports Program Learning Outcome (PLO) number 3, which is:



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The students will be able to demonstrate skills and knowledge of Functional Biology in Tropical Biology.

Particularly Performance indicator number 1, which is:

The students are able to demonstrate skills and knowledge of Animal Structure and Development

To support the attainment of those PLO 3.1, Animal Anatomy Course has course learning outcome as follows:

1. Knowledge and understanding

Students who had successfully completed this subject would have deeper knowledge and analysis capability so that they can design and conduct the research about animal anatomy or related sciences.

2. Ability/intellectual skills

Students who had successfully completed this subject would be skilled and able to elaborate themselves in various basic research, especially in animal anatomy.

3. Practice skills

Students who had successfully completed this subject would be able to do research in animal anatomy in accordance with the standard procedures and ethics.

4. Managerial and transferable skills

Students who had successfully completed this subject would be able to:

- a. work together with the other researcher in team.
- b. elaborate their skills and knowledges they have got and integrate them with various related sciences.

5. Attitude

Students who had successfully completed this subject would be:

- a. able to improve their analytical skills
- b. able to work together with the other researcher in team

Content

Animal anatomy gives explanation and information about definition of animal anatomy and its branches, and also its important role for supporting the other science. This subject discusses about anatomical structure of animal which covers integument system, musculature system, skeletal system, respiratory system, circulatory system, excretory system, reproductive system, nerve system, endocrine system, and sense organs. This subject more emphasizes the explanation about comparative anatomy on the group of animals, especially on vertebrates, and also about structure of organs which have specific features ontogenically and functionally. This course is also enriched with the recent development in animal anatomy and other



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	related subject, such as: Morphometry and Geometry , Animal Locomotion, Biomechanics, Skin and Adaptation, Vocal organ structure and Bioacoustic, and also Biomimetic and Biorobotic.
Study/exam achievements	1. Theory <ul style="list-style-type: none">a. Midterm: 40%b. Final examination: 40%c. Presentation, attendance, and activity: 20% 2. Laboratory work <ul style="list-style-type: none">a. Laboratory activity: 10%b. Laboratory report: 20%c. Mini research: 30%d. Final test: 40%
Forms of media	White board, laptop, specimens, LCD
Literature	<ol style="list-style-type: none">1. Feduccia, A. And E. Mc. Crady. 1997: Toorey's Morphogenesis of the Vertebrates. John wiley & sons. Inc. New york2. Gilbert, S.F. 1991: Developmental Biology. Third edition. Sinauer associates, inc.publ. Sunderland, Massachusetts.3. Hildebrand, M.. 1995: Analysis of Vertebrate Structure. John wiley & sons. New york.4. Kardong, K.V. 2012: Vertebrates. Comparative Anatomy, Function Evolution 6th edition. Mc. Graw Hill Company. New York.5. Kent,G.C. and L. Miller. 2003: Comparative Anatomy of the Vertebrates. WM.C.Brown publ. Dubuque.6. Walter,H.E., and L.P. sayles. 1961: Biology of the Vertebrates. A Comparative Study of Man and His Animal Allies. The Macmillan co., New York.