THE MODULE HANDBOOK
FACULTY OF BIOLOGY

Herpetology

Module code	BIO 41102
Module level	3rd year of Undergraduate Program in Biology
Abbreviation, if applicable	-
Sub-heading, if applicable	-
Courses included in the module, if applicable	-
Semester/term	Even
Module coordinator(s)	Rury Eprilurahman, S.Si., M.Sc.
Lecture(s)	1. Rury Eprilurahman, S.Si., M.Sc. 2. Drs. Trijoko, M.Si. 3. Donan Satria Yudha, S.Si., M.Sc. 4. Laksmindra Fitria, S.Si., M.Si.
Language	Indonesia
Classification within the Curriculum	Elective course
Teaching format/class hours per week during the semester	This course is organized into one class and planned to have 14 teaching weeks and 2 weeks of examination.
Workload	Estimated working hour: 10,5 hours/week.
Credit points	2-1 credits
Requirements	Animal Systematics (BIO 31101)
Learning goals/ competencies	**1. Knowledge and understanding** a. Understanding basic concept, principal, theories which connect to the structure, function, diversity, reproduction and evolution of herpetology. b. Understanding facts, concepts, principal and theory of evolution in the field of herpetological science. c. Having ability to determine and identify the biodiversity of herpetofauna (amphibians and reptiles). d. Understanding the basic concept of herpetofauna based on its biogeographic distribution. e. Student understand and able to apply the scientific method for biological research specifically herpetology. f. Understanding and implementation of conservation concept (study, save and use).

	2. Ability/intellectual skill a. Planning, doing, analyzing and reporting a scientific research in the herpetology laboratory practice and research. b. Integrating and evaluating information and data from many resources. c. Analyzing and resolving problems in the herpetology study either individual or within group. d. Students have an ability to adapt on laboratory and fieldwork situation during research. **3. Practical skill** a. Analyze the experimental research and test the results. b. Students have the ability on handling amphibians and reptiles during laboratory practice and field work. c. Student knows the good time/ temporal (recognition and understanding on seasonal of nature) and location/ spatial for conducting research on herpetology. **4. Managerial and transferable skill** a. Conducting communication effectively, either written, oral or with images. b. Applying the mathematical, chemical, physics into biological study. c. Applying and integrating biology into other science branch. d. Study independently either in new area or recognized field with open spirit and critical thinking. **5. Attitude** a. Ability to write, report and communicate the research results either orally or written b. Ability to resolve problems and finding resolution which connected to their specialty. c. Respect the originality of an idea, concept and other discoveries. d. Respect the effort of other interdisciplinary field in exploring and conserving any fossil resources. e. Professional responsibility and scientific ethic as biological scientist to the scientific progress.
Content	Herpetology course provide theory and practical about amphibians and reptiles diversity. This study comprise of characteristics, phylogeny, classification, taxonomy, anatomy, reproduction, physiology and biogeography of herpetofauna. Common known amphibians and reptiles, specifically from Indonesia, with its distribution will be given either in class or field. This course focusedon theory

	and practical skills on identification, important value of the species or taxa, sampling methods and several research based learning. Herpetology is very important course to give additional knowledge and skills on handling amphibians and reptiles.
Study/exam achievements	**1. Theory** a. Midterm: 30 % b. Final examination: 40 % c. Assignment and attandance: 15 % d. Quiz: 10 % e. Activities: 5 % **2. Laboratory work** a. Pretest: 20 % b. Weekly reports: 25 % c. Activities: 15 % d. Final test: 40 %
Forms of media	White board, notebook, specimen, LCD
Literature	a. Anonim. 1999. *Tadpoles: the biology of anuran larvae*. Edited by Roy W. Mcdiarmid and Ronald Altig. The University of Chicago Press. b. Anonim. 2003. *Grzimek's Animal Life Encyclopedia, 2nd edition. Volume 6, Amphibians*. edited by Michael Hutchins, William E. Duellman, and Neil Schlager. Farmington Hills, MI: Gale Group. c. Anonim. 2003. *Grzimek's Animal Life Encyclopedia, 2nd edition. Volume 7, Reptiles*. edited by Michael Hutchins, James B. Murphy, and Neil Schlager. Farmington Hills, MI: Gale Group. d. Berry, P.Y., 1975. *The Amphibian Fauna of Peninsular Malaysia*. Tropical Press. Kuala Lumpur. e. Cogger, H.G., and R.G. Zweifel. 2003. *Encyclopedia of Reptiles and Amphibians*. Frog City Press. San Fransisco. f. Das, Indraneil. 2010. *A Field Guide to the Reptiles of Southeast Asia*. New Holland Publishers (UK) Ltd. g. Das, Indraneil. 2004. *Lizards of Borneo: A Pocket Guide*. Natural History Publication (Borneo) Sdn. Bhd. Kota Kinabalu. h. de Rooij, Dr. Nelly. 1915. *The Reptiles of the Indo-Australian Archipelago. I. Lacertilia, Chelonia, Emydosauria*. E. J. Brill Ltd. i. de Rooij, Dr. Nelly. 1917. *The Reptiles of the Indo-Australian Archipelago. II. Ophidia*. E. J. Brill Ltd. j. Duellman, W.E., and L. Trueb. 1986. *Biology of Amphibians*. Chapter 6: Larvae, Mc Graw Hill, Phillippines. k. Gans, C., and F. Billet. 1984. *Biology of Reptilia*. Vol 6. John Willey and Sons. New York.

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p. Manthey, Ulrich. 2008. *Agamid Lizards of Southern Asia; Draconinae 1*. Edition Chimaira, Germany.
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v. Zug, G.R., 1993. *Herpetology: An Introductory Biology of Amphibians and Reptiles*. Academic Press, Inc. San Diego, California.
w. Zug, G.R., Laurie J. Vitt, and Janalee P. Caldwell. 2001. *Herpetology: An Introductory Biology of Amphibians and Reptiles*. 2nd ed. Academic Press. Printed in U.S.