THE MODULE HANDBOOK
FACULTY OF BIOLOGY
MASTER PROGRAMME

ANIMAL EMBRYOLOGY

Module code	BIO-60706
Module level	1st year of Master Program in Biology
Abbreviation, if applicable	-
Courses related	-
Semester	Even
Course coordinator(s)	Dr. Bambang Retnoaji, M.Sc.
Lecture(s)	1. Dr. Bambang Retnoaji, M.Sc.
Language	Bahasa Indonesia and English
Classification within the Curriculum	Elective Courses
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: 7,0 hours/week.
Credit	2-0 credits
Requirements	-
Course Learning Outcome	1. Able to master the process of reproduction and embryonic development (gametogenesis and organogenesis) in animal through molecular approach and its relation to gene regulations 2. Able to design embryological experiment for vertebrate model
Syllabus	Animal Embryology courses provide an understanding of the processes of organ formation and animal and human embryo development with insight at the molecular level and their relation to gene regulation at each stage of development. The topic of this subject includes an explanation of the processes of reproduction and development of the process of the formation of sex cells or gametogenesis up to the formation of functional organs, as well as the regulatory mechanism for the formation of organs.
Study/exam achievements	a. Midterm: 35% b. Final examination: 35% c. Projects: 20% d. Quiz: 10%
Forms of media	White board, notebook, LCD

Reference	1. https://embryology.med.unsw.edu.au/embryology/index.php/Animal_Development https://embryo.asu.edu/pages/embryonic-differentiation-animals 2. http://users.rcn.com/jkimball.ma.ultranet/BiologyPages/E/EmbryonicDevelopment.html 3. http://www.britannica.com/science/animal-development 4. http://www.britannica.com/science/animal-development/Organ-formation 5. Lutz Slomianka, 2009, Blue Histology, University of Western Australia, http://www.lab.anhb.uwa.edu.au/mb140/