

Module Handbook

Modul Name	Teratology
Modul Level	Bachelor
Abbreviation, if applicable:	BIS 320
Sub--heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester	Even
Module Coordinator	Prof. Win Darmanto, M.Si, Ph.D.
Lectures	Prof. Win Darmanto, M.Si, Ph.D.
Language	Bahasa Indonesia
Classification within the curriculum:	Compulsory Course / Elective Studies
Teaching format/ classhours per week during semester	300 minutes/ week
Workload per semester	100 min lecture + 100 min structural assignment + 100 min self-assignment x 13 weeks; total 3900 min = 65 hours 65/25 = 2.6 ECTS
Credit point	2
Requirements	Vertebrate Embryology
Learning goals/competencies	General Competence (Knowledge) Students are able to infer the occurrence of birth defects that caused by teratogens properly. Specific Competence <ol style="list-style-type: none">1. Students are able to explain the basic principles, the definition, and the history of Teratology.2. Students are able to explain the incidence of birth defects and the factor / materials that affect their appearance.3. Students are able to analyze the cause of the incident of birth defect that is different from one region to other region, from the data of one hospital to another.4. Students are able to explain organogenesis timing during embryo development5. Students are able to analyze the critical period of organogenesis which could cause birth defects6. Students are able to analyze the timing of when the drug is given during teratogenic test.7. Students are able to explain the mechanism of birth abnormalities in general8. Students are able to analyze any abnormalities that occur due to the teratogenic substance that is exposed to certain future9. Students are able to explain the process of abnormalities of the brain and head area10. Students are able to explain the process of abnormalities of the spinal cord and spine11. Students are able to explain the process of abnormalities of limbs and body regions12. Students are able to explain the process of digestive system disorders13. Students are able to explain the process of abnormalities of cardiovascular system

	<p>14. Students are able to explain the process of abnormalities of urogenital system</p> <p>15. Students are able to explain how to handle experimental animals in teratology experimental procedure</p> <p>16. Students are able to explain treatment method</p>
Content	<p>Explaining the definition of teratology and the incidence of disability determination; to explain organogenesis; teratogen administration, to determine and to explain the mechanisms of fetal defects and abnormalities in the regions of brain, spinal cord, head, body, limbs, cardiovascular system, urogenital system, and the digestive system; to create a draft of teratogenic testing, experimental teratology, and discuss the research journal teratology.</p>
Soft skill Attribute	Discipline and Argumentation
Study/ exam achievements	<p>Students are considered to be competent and pass if at least get 40% of maximum. Final score (NA) is calculated as follow: Paper project (30%), mid exam (30%), final exam (30%), and soft skill (10%)</p> <p>Final index is defined as follow:</p> <p>A : 75 - 100</p> <p>AB : 70 - 74.99</p> <p>B : 65 - 69.99</p> <p>BC : 60 - 64.99</p> <p>C : 55 - 59.99</p> <p>D : 40 - 54.99</p> <p>E : 0 - 39.99</p>
Form of media	LCD
Learning Method	Class and discussion
Literature	<p>a. Carlson, BM. 1988. <i>Patten' s foundation of embryology</i>, McGraw-Hill Book Co. New York</p> <p>b. Rugh, R. 1968. <i>The mouse, its reproduction and development</i>, Burgess PC. Mineapolis.</p> <p>c. Taylor, P. 1986. <i>Practical Teratology</i>, Academic Press, London.</p> <p>d. Langman, 1980. <i>Medical embryology</i>, The William & Wilkins Co. Baltimor</p>
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