

Evolution

Module name		Evolution				
Module level		3 rd year of Bachelor Program				
Abbreviation,						
Sub-heading						
Courses included in the module		BI3105 Evolution				
Semester/term		6 th Semester				
Module coordinator(s)		Prof. Dr. Djoko T. Iskandar				
Lecturer(s)		Prof. Dr. Djoko T. Iskandar Prof. Dr. Intan Ahmad				
Language		Indonesian				
Classification within the Curriculum		Compulsory courses for Bachelor Program in Biology				
Teaching format/ class hours per week during the semester		Lecture: 14 weeks x 2 credit x 60 minutes Exercises: 4 take home x 2 hours + weekly homework & self-evaluation Exams: mid-term and final				
Workload	Total Workload	96 hours; 2 CU				
		Face to face teaching	Structured Activities	Independent study	Exam	Total
	Lecture	28	32	32	4	96
Credit points		2 CU				
Requirements		Biosystematics, Genetics, Development Biology, Physiology and Ecology				
Content		<p>This course is designed to explain about:</p> <ul style="list-style-type: none"> • The phylosophy of evolutionary theory • Geological time scale • Biogeography • Origin of life • Fact & proof • Origin of biodiversity • Population genetics • Natural selection & adaptation • Species & speciation • Mechanism of speciation • Origin of organism and its impact • Relationships with other science or dicipline. 				
Learning goals/ competencies		<p><i>After completion of this module students are expected to be able to:</i></p> <p>Knowledge :</p> <ul style="list-style-type: none"> • Describe evolutionary process in the course of time, ecological condition, biological process and genetic diversity. <p>Skill :</p> <ul style="list-style-type: none"> • Link given biological and environmental information with evolutionary process and to predict the results. <p>Competence:</p> <ul style="list-style-type: none"> • Relate a given observed phenomenon in the light of evolution. 				
Study/exam achievements	Lecture (100%)					
		Midterm exam	Quiz	Final exam	Assignment/Presentation	Total
	Lecture	35%	20%	35%	10%	100%
Forms of media		Powerpoint, Reference books				
Literature		<ol style="list-style-type: none"> 1. Iskandar, DT. 2013. Evolusi. 2nd Ed, 3rd Print. Universitas Terbuka Press. 2. Ridley, M. 2009. Evolution, 3rd. Ed. John Wiley & Sons 3. Levin, H. 2006. The Earth through time. 8th ed. John Wiley & Sons. 				

4. Stearn, S.C & Hoekstra, R.F. 2005. Evolution, an introduction. 2nd ed. Oxford University Press
5. Strickberger, 2000. Evolution, Jones and Bartlett.
6. Denton, M. 1986. Evolution: A theory in Crisis. 2nd Ed. Adler & Adler.