

Final Project

Module name	Final Project					
Module level	4 th year of Undergraduate Program					
Abbreviation, if applicable						
Sub-heading, if applicable						
Courses included in the module, if applicable	BI – 4097 Final Project 1 BI – 4098 Final Project 2 BI – 4099 Seminar & Final Defence					
Semester/term	7th and 8th Semester / 4 th year					
Module coordinator(s)	Dr. Iriawati					
Lecturer(s)	<ul style="list-style-type: none"> • Final Project 1 – A. Faizal, Dian Rosleine, Iriawati • Final Project 2 and theses – Ayda T. Yusuf, Indra Wibowo • Seminar and Final Defence – Rina R. Purnamahati, Iriawati 					
Language	Indonesian					
Classification within the Curriculum	Compulsory courses for Bachelor Program in Biology					
Teaching format/ class hours per week during the semester	Research project, 7 x 3 h x 16 weeks Seminar and Final Defence, 2 x 3 x 16 weeks					
Workload	Total Workload	For each class = (28 + 35 + 40 + 8 + 2 + 2 + 5) hours =120 hours; 2 SKS				
		Face to face teaching	Assignment/ homework	Independent study	Exam	Total
	Research Project	96	-	240	-	336
	Seminar	16	-	31	1	48
	Final Defence		-	46	2	48
	Total	112		317	3	422
Credit points	<i>Final Project 1 – 4 CU; Final Project 2 – 3 CU; Seminar & Final Defence : 2 CU</i>					
Requirements	Final Project : Students have taken and passed the courses till 6 th semester (108 CU), Seminar Defence : Students have taken and finished/passed all of the courses, including final project 1 & 2, bachelor theses and seminar. Student has to submit a publication draft prior to defence					
Learning goals/ competencies	<p>Knowledge : After completion this course students are expected to be able to:</p> <ul style="list-style-type: none"> • use / apply concept and theoretical biology related to their research topics, • gain a comprehensive knowledge on research methodology, and • enable to inquire an appropriate references for their research <p>Skill: After completion this course students are expected to be able to:</p> <ul style="list-style-type: none"> • skill up their ability to apply research instruments (tools and methods) • develop an appropriate research design and conduct a research • critically analyse the data of their research <p>Competences : After completion this course students are expected to be able to:</p> <ul style="list-style-type: none"> • Show a discipline and trustworthy at their work • Appreciate their research data and have a courage to present their research data • Appreciate other researcher's (research & data) • work independently as well as in a teamwork 					

Content	<p>Final research can be conducted based on: experiments, biological modelling, or part (sub topics) of bigger research project. A full cycle research is organized into several processes</p> <ol style="list-style-type: none"> 1. problem identification and hypotheses formulation 2. literature review 3. decide experimental design 4. collecting experimental or survey data 5. data assessment, analysis, interpretation and synthesis 6. Comparing research results with previous research 7. Making a conclusions 8. participate and record discussions, 9. communicate the findings of their research in writing and verbally, in the most appropriate manner (aptitude skill) 						
Study/exam achievements	<i>Research Project 1 (100%); Research Project 2 (100%); Seminar (50%) ; Final Defence (50%)</i>						
		<i>Midterm exam</i>	<i>Final exam</i>	<i>Research Proposal</i>	<i>Reports/ Theses/ Publication Draft</i>	<i>Student presentations</i>	<i>Total</i>
	<i>Final Project 1</i>	-	-	10%	90%	-	100%
	<i>Final Project 2</i>	-	-	-	100%	-	100%
	<i>Seminar & Final Defence</i>	-	40%	-	10%	50%	100%
Forms of media		<i>Classical laboratory teaching tools:</i>		<i>white board/ chalk and talk, animation, flashcard, dissection, movie, power point</i>			
		<i>Integrated teaching tools:</i>		-			
		<i>Digital teaching tools:</i>		-			
		<i>Problem based teaching tools:</i>		-			
Literature		<ol style="list-style-type: none"> 1. Randall D, Burggren W and French K. 2002. <u>Eckert's Animal Physiology: Mechanisms and Adaptations</u>, 5th ed. New York: WH Freeman & Co 2. Norris, B., Kristan D. 2006. <u>Comparative Animal Physiology Lab Manual</u>. San Diego: Aztec Shops Custom Materials. 3. Wyse, G.A. and M. Anderson (2012). <u>Animal Physiology (3rd Ed)</u> by R.W. Hill, Published by Sinauer Associates, Inc., 					