

UNIVERSITAS NEGERI YOGYAKARTA FACULTY OF MATHEMATICS AND SCIENCES DEPARTMENT OF BIOLOGY EDUCATION Colombo Street 1 Yogyakarta 55281 Phone: (0274)565411 Ext. 217, (0274)565411(Administration Office), fax (0274)548203 Website:fmipa.uny.ac.id, E-mail :humas_fmipa@uny.ac.id

Bachelor of Science in Biology

MODULE HANDBOOK

Module name:	Laboratory Work in Endocrinology			
Module level, if applicable:	Undergraduate			
Code:	BIO6151			
Sub-heading, if applicable:				
Classes, if applicable:	-			
**	-			
Semester:	Even			
Module coordinator:	Dr. Heru Nurcahyo			
Lecturer(s):	Ir. Suhandoyo, M.Si			
Language:	Bahasa Indonesia			
Classification within the curriculum:	Compulsory Course			
Teaching format / class hours	100 minutes lectures, 120 minutes structured activities, and 120			
per week during the semester:	minutes individual studyper week			
	Total workload is 91 hours per semester which consists of 100			
Work load:	minuteslectures, 120 minutes structured activities, and 120 minutes			
	individual study per weekfor 16 weeks.			
Credit points:	2 SKS (3 ECTS)			
Prerequisites course(s):	General Biology			
Perogram Learning Outcomes (PLO):	 4. Comprehensively mastering Biology (core biology) to solve problems in the field of Biology (problem-solving) and to underlie the concepts of related sciences 6. Being adaptive, creative, innovative in applying the concepts of Biology and other related fields 9. Being able to work and create jobs/being an entrepreneur in the field of Biology 11. Possessing scientific skills to support the ability to speak in local, national, and international forums 			
Course Outcomes (CO):	 After taking this course, the students have ability to: CO1. Identify the concept of Kontrak practice Penjelasan awal Berbagai Model the obyects of endocrinology experiment CO2. Understand the Animal model for endocrynology research: study the article "On The Mechanism of Trophic Hormone Action in The Ovary" CO3. Elaborate the study of "Surgical Methods: Organ culture, tissue culture methods" CO4. Analyze the "The measurement of hormone level using <i>Radioimmuno-assay</i> (RIA) methods" CO5. Apply the principles of biosinthesis "peptide hormone, amino acid hormone and steroide hormone" and its application on daily live CO6. Elaborate "The measurement of hormone level using <i>Enzyme Linkage Immunosorbent Assay (ELISA)</i> methods" CO7. Explain the Mechanism action of various hormone: target 			

	cell, reseptor specific, second messenger, and G-proteins						
	CO8. Explain the measurement of hormone level using						
	 of "Histological-Cytological Studies: Immunocytochemistry (IHC)" Methods CO9. Study the application of the concept of pituitari anterior hormones: Gonadotropin Hormone (GnH), GH, PL, FSH, LH, TSH, ACTH, MSH, Endorphins and its implication from research report in journal. CO10. Elaborate the concept of "Peran cAMP dalam mekanisme kerja FSH"Posterior Pituitary hormones: ADH, oxytocin and its implication CO11. Describe the definition of research methode of endocrinology including: kind of research, research desing, research methods, rseacrh variable, instrumen to measurement, research procedure, data analysis. CO12. Communicate the result of "endocrinology research 						
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	This		sses the awareness	of endocrinolog	v problems.		
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Study/examachievements:	No	CO CO1 to	Assessment Object Observed attitudes ,	Assessment Technique Survey, test, rubrics	C		
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<i>Physiology</i> , 5 th ed. USA: MC Graw Hill Companies, Inc.	
<i>Thystology</i> , 5 ed. OSTI Me Oluw Thin Companies, me.	

PLO and CO mapping

	PLO1	PLO2	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11
CO1			✓							
CO2			\checkmark							
CO3			\checkmark							
CO4			\checkmark							
CO5			\checkmark							
CO6			\checkmark		\checkmark					
CO7			\checkmark		\checkmark					
CO8			\checkmark		\checkmark					
CO9			✓		✓					
CO10			✓		✓					
CO11			✓		✓			✓		
CO12										\checkmark