

## Methodology in Biomedical Analysis

Module name		<i>Methodology in Biomedical Analysis</i>				
Module level		4 <sup>th</sup> year of Bachelor program				
Abbreviation, if applicable		-				
Sub-heading, if applicable		-				
Courses included in the module, if applicable		BI4104 Methodology in Biomedical Analysis				
Semester/term		7 <sup>th</sup> Semester				
Module coordinator(s)		Dr. Anggraini Barlian				
Lecturer(s)		Dr. Anggraini Barlian				
Language		Indonesian				
Classification within the Curriculum		Elective courses for Bachelor Program in Biology				
Teaching format/ class hours per week during the semester		Lecture (face to face teaching): 2 hours x 14 weeks Practical class: 2 x 5 hours x 14 weeks				
Workload	Total Workload	208 hours; 3(2) CU				
		Face to face teaching	Structured Activities	Independent study	Exam	Total
	Lecture	14	16	14	4	48
	Practical class	56	50	50	4	160
	Total				208	
Credit points		<i>Methodology in Biomedical Analysis (3(2) Credits)</i>				
Requirements		-				
Content		<p><i>This course prepares students with the basic methodology generally required in the analysis of research topics in the field of biomedical science. MAB will discuss:</i></p> <ul style="list-style-type: none"> <li>- <i>commonly used histological methods</i></li> <li>- <i>Methods of paraffin, a method for preparation of intact</i></li> <li>- <i>TEM</i></li> <li>- <i>SEM</i></li> <li>- <i>Immunohistochemistry and immunocytochemistry</i></li> <li>- <i>The detection of proteins and nucleic acids</i></li> <li>- <i>Recombinant DNA techniques such as cloning and DNA manipulation</i></li> <li>- <i>Method to create transgenic animals.</i></li> </ul>				
Learning goals/competencies		Students are able to : <ul style="list-style-type: none"> <li>- Know various methodology to conduct biomedical research and</li> <li>- Understand how to analyze data obtained from research in biomedical science</li> </ul>				
Study/exam achievements		Exam	Laboratory Works (attendance, prepare constructions)	Laboratory Presentation		Total
		30%	50%	20%		100%
Forms of media		Classical teaching tools:		White board, power point presentation		
		Digital teaching tools:		Video/CD, Website		
Literature		1. Ronald B. Corley. 2005. <i>A guide to methods in the biomedical sciences</i> . Springer Science and Business Media, Inc.				