



**Diponegoro University**  
**Faculty of Science and Mathematics**  
**Undergraduate Program Of Chemistry**

Module designation	<b>Research Project 2 (TR2): Thesis</b>
Semester(s) in which the module is taught	8
Person responsible for the module	All chemistry lecturers
Language	Indonesian
Relation to curriculum	Compulsory/ <del>elective</del> / <del>specialisation</del>
Teaching methods	Project
Workload (incl. contact hours, self-study hours)	Activities in the laboratory: 6 weeks x 3 credits/week x 170 minutes/credit
Credit points	3
Required and recommended prerequisites for joining the module	TR1

<p>Module objectives/intended learning outcomes</p>	<p>S9 Demonstrates an attitude of being responsible for work in his field of expertise independently.</p> <p>KU1 Able to apply logical, critical, systematic, and innovative thinking in the context of the development or implementation of science and technology</p> <p>KU2 Able to demonstrate independent, quality, and measurable performance.</p> <p>KU4 Able to compile a scientific description of the study results in the form of a thesis or final project report and upload it on the university website.</p> <p>KU5 Able to make decisions regularly in the context of solving problems in their area of expertise, based on the results of analysis of information and data</p> <p>KU6 Able to maintain and develop a network with supervisors, colleagues, colleagues both inside and outside the institution</p> <p>KU9 Able to document, store, secure, and retrieve data to ensure validity and prevent plagiarism</p> <p>KK1 Able to produce the correct conclusions based on the results of the interpretation of the chemical analysis that has been carried out.</p> <p>KK2 Able to solve science and technology problems in general and straightforward chemical fields such as identification, analysis, isolation, transformation, and synthesis of micro-molecules through the application of knowledge of structure, properties, kinetics, and energetics of molecules and chemical systems, with analysis and synthesis methods on specific chemical fields, as well as the application of relevant technologies.</p> <p>KK3 Able to analyse several alternative solutions in chemical analysis and surrounding studies and present analysis conclusions for making the right decisions.</p> <p>PP2 Mastering complete operational knowledge about functions, how to operate research supporting chemical instruments, as well as data analysis in line with research objectives and hypotheses</p>
<p>Content</p>	<ol style="list-style-type: none"> <li>1. BK24. Scientific Writing and Presentation (PB1) <ol style="list-style-type: none"> <li>a. Writing research reports</li> <li>b. Develop scientific arguments for research data</li> <li>c. Table performance</li> <li>d. Graphic presentation in research reports</li> </ol> </li> <li>2. BK24 and 30. Eligibility Session (PB 2) <ol style="list-style-type: none"> <li>a. Writing a thesis according to environmental rules</li> <li>b. Presentation design</li> <li>c. Information communication</li> </ol> </li> <li>3. BK24 and 30. Thesis Session (PB 3) <ol style="list-style-type: none"> <li>a. Thesis examination</li> <li>b. Compiling scientific articles in journal format</li> </ol> </li> </ol>
<p>Exams and assessment formats</p>	<ol style="list-style-type: none"> <li>1. Output: Thesis</li> <li>2. Oral defence contributes 70 % and the final report 30 % to the grade (Research Project 2)</li> </ol>

Study and examination requirements	<ol style="list-style-type: none"><li>1. Compiling at least 141 sks</li><li>2. Completed academic and non-academic obligations</li></ol>
Reading list	<ol style="list-style-type: none"><li>1. Chemistry Department Research Assignment Guide 2018</li><li>2. Minister of Research, Technology and Higher Education Regulation on Higher Education</li><li>3. Permendiknas 2012 concerning KKNl</li></ol>