Diponegoro University
Faculty of Science and Mathematics
Undergraduate Program Of Chemistry

Module designation	**Integrated Chemistry Practice (PKT)**
Semester(s) in which the module is taught	6
Person responsible for the module	All Lecturers of Undergraduate Chemistry
Language	Indonesian
Relation to curriculum	Compulsory ~~/ elective / specialisation~~
Teaching methods	Labwork
Workload (incl. contact hours, self-study hours)	Face to Face: 1 x (1 x 50 min); Self Study : 1 x (1 x 60 min); Structured tasks : 1 x (1 x 60 min)
Credit points	1
Required and recommended prerequisites for joining the module	GPA 2.5, passed all practicums

Module objectives/intended learning outcomes	1. Appreciating the diversity of cultures, views, religions, and beliefs, as well as other people's original opinions or findings. 2. Cooperating and having social sensitivity and concern for society and the environment. 3. Internalize academic values, norms, and ethics. 4. Demonstrate an attitude of being responsible for work in their field of expertise independently. 5. Internalize the spirit of independence, struggle, and entrepreneurship. 6. Able to apply logical, critical, systematic, and innovative thinking in the development or implementation of science and technology that pays attention to and uses humanities values by their field of expertise. 7. Able to demonstrate independent, quality, and measurable performance. 8. Able to examine the implications of developing or implementing science and technology that pays attention to and applies humanities values according to their expertise based on scientific principles, procedures, and ethics to produce solutions, ideas, designs, or art criticism. 9. 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 college website. 10. 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. 11. Able to maintain and develop a network with supervisors, colleagues, colleagues both inside and outside the institution. 12. Able to be responsible for achieving group work results and supervise and evaluate the completion of work assigned to workers under their responsibility. 13. Able to carry out the self-evaluation process of the workgroup under their duty and manage to learn independently. 14. Able to document, store, secure, and retrieve data to ensure validity and prevent plagiarism. 15. Able to produce appropriate conclusions based on the identification, analysis, isolation, transformation, and synthesis of chemicals that have been carried out. 16. Able to analyze several alternative solutions in identification, analysis, isolation, modification, and synthesis of available chemicals and present analysis conclusions for appropriate decision making. 17. Able to use software to determine the structure and energy of macromolecules, software to assist analysis and synthesis in general or more specific chemical fields (organic, biochemical, or inorganic), and data processing (analytical chemistry). 18. Mastering complete operational knowledge of functions, operating standard chemical instruments, and analyzing data and information from these instruments.

Content	1. Assistance and Group division 2. Practical module from the lab. KF, KA, Kano, KO, Bio 3. Presentation
Exams and assessment formats	Presentation
Study and examination requirements	
Reading list	