

Module Handbook

Module Name:	General Chemistry I (Practical)
Module Level:	Bachelor
Abbreviation, if applicable:	KID102
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/term:	1st / First Year
Module coordinator(s):	Dra. AningPurwaningsihM.Si
Lecturer(s):	Dra. Aning Purwaningsih, M.Si ,Dr. Ir.Suyanto M.Si,Dra. Usreg Sri Handajani, M.Si , M Zaki Fahmi SSi,MSi, Ph.D, Siti Wafiroh, S.Si, M.Si Harsasi S.Si. M.Si, Yanuardi Raharjo ,S.Si, M.Sc, Ahmadi Jaya Permana, S.Si, MSi, Sofijan Hadi, S.Si, MSi , Dr. Purkan M.Si, Dr. Sri Sumarsih MSi
Language:	Bahasa Indonesia
Classification within the curriculum	Compulsory Course / Elective Studies
Teaching format / class hours per week during semester:	2 hours laboratory work (50 min / hours)
Workload:	2 hours doing worksheet and pretest preparation, 2 hours laboratory work, 2 hours group discussion, searching literature and writing report, 13 week per semester, and total 78 hours per semester ~ 2.6 ECTS *
Credit Points:	1 SCU
Requirements:	already taken / can be taken simultaneously with lecture General Chemistry I (KID101)
Learning goals/competencies:	<p>General competence (Skills): Preparing, assembling tools and practice for chemical bonding materials, molar volume, speed of reaction, redox reactions, chemical elements, colligative properties, and identify seyawa carbon (alcohols, phenols, ketones, aldehydes, ethene, ethyne and carboxylic acids)</p> <p>Specific Competence</p> <ul style="list-style-type: none"> - Students are able to differentiate the chemical bonds of a compound - Students are able to calculate the molar volume of gas - Students are able to calculate the speed of a chemical reaction - Students are able to identify an element with spot test, redox reactions, and colligative properties - Mahasiswa Able to identify carbon compounds (alcohols, phenols, ketones, aldehydes, ethene, ethyne and carboxylic acids)
Content:	Consisting of experimental chemical bonding, reaction speed, molar volume, reduction and oxidation, the determination of equivalent weight, the introduction of elements (Ag +, Pb 2+, K +, Na +, NH4 +, Mg 2+, Ba2 +, Ca2 +, CO32-, NO3-, SO42-, CNS-), colligative properties, alcohols, phenols, ketones and aldehydes, ethene and ethyne, as well as

	carboxylic acids
AttributeSoft skill	The Discipline of presence, submitting journal, hygiene of laboratory table
Study/exam achievements:	<p>Students are considered to be competent and pass if at least get 55.</p> <p>1. Daily Value: pretest 20%, 40% lab work (including timely attendance, including the on time of collecting journals, skills and activeness during practicum, observations made, and the cleanliness of the table after a practicum), discussion 20%, reports 20%.</p> <p>2. UAS (Written Test)</p> <p>Final daily Score = 60% + 40% Final examination (UAS) score</p> <p>Table Value Graduation</p> <p>A: 100> NA≥75</p> <p>AB: 74,9≥NA≥70</p> <p>B: 69,9≥NA≥65</p> <p>BC: 64,9≥NA≥60</p> <p>C: 59,9≥NA≥55</p> <p>D: 54,9≥NA≥40</p> <p>E: 39,9≥NA</p>
Learning Methods	OHP,LCD, white board, practicum guidance
Forms of Media:	Practicum in laboratory ,and discussion
Literature:	<p>1.Kaisar, R.W. and Griffith, C. H., 1991. General Chemistry Laboratory Manual, 2nd ed., Ginn Press, Kentucky.</p> <p>2. Raymond Chang., 2004, Kimia Dasar (Konsep Konsep Inti), Edisi Ketiga , Erlangga , Jakarta</p> <p>3.Vogel, A.I., 1979, Textbook of Macro and Semimicro Qualitative Inorganic Analysis, 5th Ed, Longman Group, Ltd., London</p> <p>4. Whitten, K.D., and Dari, R.E., 1992, General Chemistry and Qualitative Analysis, 4th Ed, Saunders, Publ., Orlando</p>
Notes:	<p>*Total ECTS = {(total hours workload x 50 min) / 60 min } / 25 hours</p> <p>Each ECTS is equals with 25 hours</p>