MODULE HANDBOOK

Module Name	School Chemistry
Module level	Bachelor
Abbreviation, if applicable	8420402171
Sub-heading, if applicable	-
Course included in the module, if applicable	-
Semester/term	6th/Third Year
Module coordinator(s)	Dian Novita, ST., M.Pd.
Lecturer(s)	1. Dr. Ismono, M.Si. 2. Dr. Muchlis, M.Pd. 3. Dian Novita, ST., M.Pd. 4. Rusmini, S.Pd., M.Pd.
Language	Indonesian
Classification within the Curriculum	Compulsory Course
Teaching format/class hours per week during the semester:	2 hours lecturers (50 min per hours)
Workload:	1 CU for bachelor degree equals to 3 workhours per week or 170 minutes (50' face to face learning, 60' structured learning, and 60' independent learning). In one semester, courses are conducted in 14 weeks (excluding mid and end-term exam). Thus, 1 CU equals to 39.67 workhours per semester. One CU equals to 1.59 ECTS.
Credit points:	2 CU = 2 x 1.59 = 3.18 ECTS
Prerequisites course(s):	-
Targeted learning outcomes:	1. Understand the basic principles of chemistry at the SMP, SMA, and SMK education unit levels in accordance with the applicable curriculum covering the depth and breadth of the material. 2. Able to solve science and technology problems in the general field of chemistry and in a simple scope such as through the application of knowledge of chemical materials at the junior, senior high and vocational school level according to the applicable curriculum covering the depth and breadth of the material and the application of relevant technology. 3. Having the ability to utilize ICT-based learning resources and media in understanding the concept of chemistry. 4. Make decisions about the relationship between basic chemical concepts and laboratory activities, research results, and the existence of chemistry in everyday life. 5. Demonstrate an attitude of responsibility for work in his field of expertise independently.
Content:	1. Introduction to Chemistry and Chemical Data Analysis 2. Substances, Moles, and Stoichiometry 3. Atomic and Electron Structure 4. Periodic and Periodic Table of the Elements

	5. Ionic Bonds and Metal Bonds 6. Covalent Bonds and Chemical Reactions 7. Properties of Substances and the Law of Gases 8. Energy and Chemical Reactions 9. Chemical Reactions and Equilibria 10. Redox and Electrochemical Reactions 11. Mixtures and Solutions 12. Hydrocarbons, Substituted Hydrocarbons and Their Reactions 13. Chemistry in Everyday Life
Study / exam achievements:	Students are considered to be competent and pass if at least get 55 Final score is calculated as follows: 20% participation + 30% assignment + 20% middle exam (UTS) & 30% final exam (UAS) Table index of graduation • A = 4 (85 ≤-≥ 100) • A- = 3,75 (80 ≤-< 85) • B+ = 3,5 (75 ≤- < 80) • B = 3 (70 ≤-< 75) • B- = 2,75 (65 ≤-<75) • C+ = 2,5 (60 ≤-<65) • C = 2 (55 ≤-<60) • D = 1 (40 ≤-<55) • E = 0 (0 ≤-<40)
Media:	Computer, LCD, White board
Learning Methods	Individuals assignment, group assignment, discussion, presentation, and practicum
Literature:	1. Dingrando, L., Gregg, K.V., Hainen, N., Wistrom, C. 1990. *Chemistry: Matter & Change, Student Edition (GLENCOE CHEMISTRY) 2nd Edition*. USA: John Wiley & Sons Limited. 2. Brady, J.E., Jespersen, N.D., Hyslop, A. 2014. *Chemistry*. USA: John Wiley & Sons Limited. 3. Brady, E. James. 1990. *General Chemistry: Principles and Structure*. USA: John Wiley & Sons Limited.