MODULE HANDBOOK

Module Name	Chemical Kinetics
Module Level	Bachelor
Abbreviation, if applicable	8420403135
Sub-heading, if applicable	-
Course included in the module, if applicable	-
Semester/term	5th/Third year
Module coordinator(s)	Prof. Dr. Suyono, M.Pd.
Lecturer(s)	Bertha Yonata, M.Pd.
Language	Indonesian
Classification within the curriculum	Compulsory
Teaching format/class hours per week during the semester	3 hours lectures (50 min/hour)
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 Point	3 CU = 3 x 1.59 = 4.77 ECTS
Prerequisite Course(s)	Quantum Chemistry
Learning Outcome	Students have the ability to communicate the results of experiments so they are able to develop a conceptual framework for formulating actions or alternative actions in solving chemical problems in life. Students skillfully use tools in determining reaction rates and reaction mechanisms based on empirical facts (inductive dimensions) and submit theoretical arguments to explore empirical facts that occur (deductive dimensions) in the field of reaction kinetics. Students have knowledge of the laws of reaction rates and reaction mechanisms based on empirical facts (inductive dimensions) and submit theoretical arguments to explore empirical facts that occur (deductive dimensions) in the field of reaction kinetics. Students have the ability to cooperate and are responsible for assessing the rate of reaction as a function of concentration, temperature, and catalyst as well as the legal interpretation of the reaction rate to the discussion and design of reaction mechanisms (including photochemical).
Content	Empirical and theoretical studies of reaction rates as a function of concentration, temperature and catalysts and the interpretation of the reaction rate laws to the discussion and design of reaction mechanisms (including photochemical).
Study/Exam Achievement	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, laboratory instruments
Learning Methods	Lectures, discussion, assignment, laboratory activity
Literature	Wilkinson,Frank. 1936. *Chemical Kinetics and Reaction Mechanisms*. Victoria: Van Nostrand Reinhold Company. Atkins, P. W. 1995. *Physical Chemistry*. Third Edition. New York: W. H. Freeman and Company. Castelan, Gilbert W. 1983. *Physical Chemistry*. Third Edition. Tokyo: Addison-Wesley Publishing Company.