UNIVERSITAS NEGERI YOGYAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
DEPARTMENT OF CHEMISTRY
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Bachelor of Science in Chemistry **MODULE HANDBOOK**

Module name:	Reaction Mechanism of Organic Compound
Module level, if applicable:	Undergraduate
Code:	KMA 6233
Sub-heading, if applicable:	-
Classes, if applicable:	-
Semester:	6th
Module coordinator:	Prof. Dr. Sri Handayani
Lecturer(s):	Prof. Dr. Sri Handayani
Language:	Bahasa Indonesia and English
Classification within the curriculum:	Elective Subject
Teaching format / class hours per week during the semester:	100 minutes lectures, 120 structured activities and 120 individual study per week
Workload:	Total workload is 90,67 hours per semester which consists of 100 minutes lectures, 120 structured activities and 120 individual study per week for 16 weeks
Credit points:	2 SKS (3 ECTS)
Prerequisites course(s):	-
Course Outcomes	After taking this course, the students are expected to be able to: CO1: Explain the effect of radical reactions on the mechanism of organic reactions in a chemical study CO2: Understand the concept of reaction mechanism through analysis of the results of research into organic reaction mechanisms CO3: Explain the contribution of the concept of organic reaction mechanisms to the advancement of chemical research innovations
Content:	This course provides experience for students to study the factors that influence the mechanism of organic reactions, the mechanism of organic chemical reactions based on the structure and reactivity of functional groups, as well as the mechanism of radical reactions and their applications. 1. Nucleophilic addition to the double bond 2. Nucleophilic addition to conjugated double bonds 3. Electrophilic additions 4. Nucleophilic substitution 5. Electrophilic substitution 6. Elimination 7. Radical reaction
Study / exam achievements:	Attitude assessment is carried out at each meeting by observation and/or self-assessment techniques using the assumption that basically every student has a good attitude.

<table>
<tr><td></td><td>The student is marked very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not taken into account in the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude. The final mark will be weight as follow:
<table>
<tr><th>No</th><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr>
<tr><td>1</td><td>CO1,
CO2,
CO3,</td><td>a. Assignments
b. Activity
c. Final Exam
d. Midterm Exam</td><td>Presentation / written test</td><td>20%
20%
30%
30%</td></tr>
<tr><td colspan="4">Total</td><td>100%</td></tr>
</table></td></tr>
<tr><td>Forms of media:</td><td>Handout, Board, LCD Projector, Laptop/Computer, Module</td></tr>
<tr><td>References:</td><td>• Michael B Smith, (2020), Reaction, Mechanism and Structure eight edition.
• Reinhard Bruckner, Organic Mechanisms Reactions, Stereochemistry and Synthesis, (2010)</td></tr>
</table>

PLO and CO mapping

	PLO									
	Attitude	General Skill		Knowledge				Specific Skill		
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10
CO1					√					
CO2							√			
CO3									√	