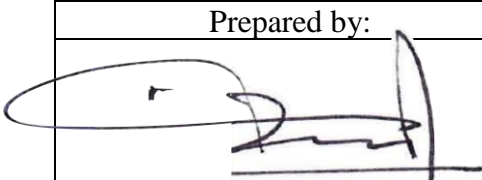

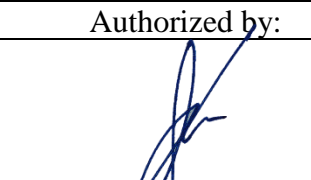




Faculty of Natural Sciences and Mathematics  
Chemistry Department  
Chemistry Education Study Program

Module name		Organic Chemistry II		
Module level, if applicable		2 <sup>nd</sup> Year		
Code, if applicable		SPK – 318		
Semester(s) in which the module is taught		3 <sup>rd</sup> semester		
Person responsible for the module		Dr. Tatang Shabur Julianto, M.Si.		
Lecturer		Dr. Tatang Shabur Julianto, M.Si. Lina Fauzi'ah, M.Sc.		
Language		Indonesia		
Relation to curriculum		<i>Compulsory</i>		
Teaching methods	Class size	Forms of active participation	Workload 91 hours	
Class discussion	50-60	Discussion	Lecture: 100 (min) x 16 (meeting)	27 hours
			Assignment: 120 (min) x 16 (week)	32 hours
			Independent study: 120 (min) x 16 (week)	32 hours
ECTS credit		3.25		
Credit points		2 SCU		
Requirements according to the examination regulations		Minimum attendance at lectures is 75% (according to UII regulation)		
Recommended prerequisites		Organic chemistry I		
Related course		Organic chemistry I, Organic chemistry lab work		
Module objectives/intended learning outcomes		<p>On successful completion of the course students should be able to:</p> <ol style="list-style-type: none"> <li>1. Explain theoretical concepts about stereochemistry</li> <li>2. Explain theoretical concepts about organic reaction mechanisms</li> <li>3. Determine the reactants/reagents/products in an organic compound reaction</li> <li>4. Write predictions of the reaction mechanism of an organic compound reaction</li> </ol>		
Content		<ul style="list-style-type: none"> <li>• Stereochemistry: cycloalkane conformation, stereoisomer, diastereoisomer, enantiomer, cis-trans isomer, E/Z, D/L, R/S configuration.</li> </ul>		

	<ul style="list-style-type: none"> <li>Organic reaction mechanism: nucleophile, electrophile, homolytic and heterolytic cleavage, reaction arrow, organic reaction type.</li> <li>Substitution Reaction: <math>S_N1</math> and <math>S_N2</math></li> <li>Elimination Reaction: E1 and E2</li> <li>Addition's Reaction</li> <li>Rearrangement reaction</li> </ul>															
Study and examination requirements and forms of examination	Final score (NA) is calculated as follows:															
	<table border="1"> <thead> <tr> <th>Intended learning outcomes</th> <th>Weight (%)</th> <th>Technique of assessment</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>15</td> <td>Written test: assignment, midterm</td> </tr> <tr> <td>2</td> <td>20</td> <td>Written test: assignment, midterm</td> </tr> <tr> <td>3</td> <td>35</td> <td>Written test: assignment, midterm, final examination</td> </tr> <tr> <td>4</td> <td>30</td> <td>Written test: assignment, midterm, final examination</td> </tr> </tbody> </table>	Intended learning outcomes	Weight (%)	Technique of assessment	1	15	Written test: assignment, midterm	2	20	Written test: assignment, midterm	3	35	Written test: assignment, midterm, final examination	4	30	Written test: assignment, midterm, final examination
	Intended learning outcomes	Weight (%)	Technique of assessment													
	1	15	Written test: assignment, midterm													
	2	20	Written test: assignment, midterm													
3	35	Written test: assignment, midterm, final examination														
4	30	Written test: assignment, midterm, final examination														
Media employed	Power point slide presentation, video, Google classroom															
Reading list	<p>Brown, W.H., and Poon, T., 2014, Introduction to Organic Chemistry 5th Edition, United States of America: John Wiley &amp; Sons.</p> <p>Hornback, J.M., 2005, Organic Chemistry second edition, Belmont: Thomson/Brooks Cole.</p> <p>McMurry, J., 2010, Organic Chemistry with Biological Application 2e, Belmont: Brooks Cole.</p>															

Prepared by:	Verified by:	Authorized by:
		
Person responsible for the module	Student representative	Coordinator Program