UNIVERSITAS NEGERI YOGYAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
DEPARTMENT OF BIOLOGY
1 Colombo Street, Yogyakarta 55281
Phone (0274)565411 ext. 217, (0274)565411 (Administration office),
fax (0274)548203
Website: fmipa.uny.ac.id, e-mail: humas_fmipa@uny.ac.id

Bachelor of Science in Biology **MODULE HANDBOOK**

Module name:	**General Chemistry Laboratory Work**
Module level, if applicable:	Undergraduate
Code:	KIM 6401
Sub-heading, if applicable:	-
Classes, if applicable:	-
Semester:	1st
Module coordinator:	Jaslin Ikhsan, Ph.D.
Lecturer(s):	Nur Fitriyana, M.Pd.
Language:	Bahasa Indonesia
Classification within the curriculum:	Compulsory Course
Teaching format / class hours per week during the semester:	170 minutes includes the laboratory work and it's reporting per week
Workload:	Total workload of the activity is 45,33 hours per semester which consist of 170 minutes laboratory work with it's reporting per week for 16 weeks.
Credit points:	1 SKS (1,645 ECTS)
Prerequisites course(s):	-
Course Outcome:	After taking this course, the students are expected to be able to: CO1 Students understand the basic concept of chemistry and their application in daily life. CO3 Students can evaluate the results of chemistry research based on data analysis CO4 Sudents can communicate oral and written form the results of the laboratory work
Content:	The objective of General Chemistry Laboratory Work course for Biology is to provide the basics skills of chemistry that used to understand the chemistry concept that related with biology. This course conducts the experiment about stoichiometry, solutions, chemical kinetics, thermochemistry, nuclear chemistry and radiochemistry, as well as organic and biochemistry. The learning methods use are experiment in the laboratory, discussion, question and answer, lectures. The assesment technique in this course include observation, written tests, quizzes, laboratory report, and performance.

<table>
<tr><td>Study/ exam achievements:</td><td>The final mark in this course 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 rowspan="4">CO1, CO2, CO3</td><td>a. Structural assignments</td><td>Laboratory report, quizzes</td><td>20%</td></tr>
<tr><td>2</td><td>b. Pre-test</td><td>Written test</td><td>30%</td></tr>
<tr><td>3</td><td>c. Final exam</td><td>Written test</td><td>30%</td></tr>
<tr><td>4</td><td>d. Presentation the result of the laboratory work</td><td>Performance and observation</td><td>20%</td></tr>
<tr><td colspan="4">Total</td><td>100%</td></tr>
</table></td></tr>
<tr><td>Forms of media:</td><td>Board, LCD Projector, Laptop/ Computer, Module, laboratory work equipments.</td></tr>
<tr><td>References:</td><td>General chemistry laboratory work module for Biology.
Burdge, J. (2011). Chemistry 2nd Ed. New York: McGraw-Hill.
Chang, R. (2007). Chemistry 10th Ed. New York: McGraw-Hill.
Partana, C. J. (2002). Common text book kimia dasar 2. Yogyakarta: UNY dan JICA.
Sukarna, I. M. (2002). Common text book kimia dasar 1. Yogyakarta: UNY dan JICA.</td></tr>
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PLO and CO mapping

Course Outcomes (CO)	PLO										
	Attitude			Knowledge	Specific Skill				Generic Skill		
	PLO 1	PLO 2	PLO 3	PLO4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11
CO1						√					
CO2										√	
CO3											√