



UNIVERSITAS NEGERI JAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
CHEMISTRY STUDY PROGRAM

Jl. Rawamangun Muka, RT 11/RW 14, Rawamangun, Pulo Gadung,
 East Jakarta City, Special Capital Region of Jakarta 13220
 Phone/Fax: (021) 4894909, E-mail: kimia@unj.ac.id, <http://fmipa.unj.ac.id/kimia/>

Bachelor in Chemistry

MODULE HANDBOOK

| | | | | | |
|--|---|----------------------------|----------------------|-------------|---------------------|
| Module name: | Practicum of Basic Physics | | | | |
| Module level, if applicable: | Undergraduate | | | | |
| Code: | 32251011 | | | | |
| Sub-heading, if applicable: | - | | | | |
| Classes, if applicable: | - | | | | |
| Semester: | 1 st | | | | |
| Module coordinator: | Dr. Fera Kurniadewi, M.Si. | | | | |
| Lecturer(s): | Wirda Nilawati, M.Si. | | | | |
| Language: | Indonesia | | | | |
| Classification within the curriculum: | Compulsory Courses in the first year (1 st semester) Bachelor Degree | | | | |
| Class Size | 40 | | | | |
| Type of Teaching | In class activity : Team Based Project and Project based Learning Structured activity : Group Discussion using WorkSheet Independent activity : Individual task | | | | |
| Teaching format / class hours per week | Learning activity can be carried out in the form of Laboratory activity: 170 minutes per week <ul style="list-style-type: none"> • Safety induction: 1 time (MSDS, safety equipment, waste disposal) • Preparation: 2 time (chemical preparation and experiment equipment) • Laboratory work: 8 times (8 project topics, i.e pretest, practicum activity, and writing report) Discussion: 170 minutes for 3 time (presentation and discussion of practical results) Examination: 170 minutes for 2 times (mid and final examination) | | | | |
| Workload: | CU | Laboratory Activity | Discussion | Type | Examination |
| | 1 | 28.33 h 0.94 ECTS | 11.33 h 0.38 ECTS | P | 5.67 h 0,18 ECTS |
| Credit points: | 1 CU (1.5 ECTS) | | | | |
| Prerequisite course(s): | Basic Physic | | | | |

| <p>Course Outcomes :</p> | <p>CLO 1 Students have an understanding of the purpose, scope materials, strategies and evaluation of lectures (understanding and agree on a practicum contract).</p> <p>CLO 2 Determining the value of Young's modulus on stem elasticity</p> <p>CLO 3 Determining the force constant of the experiencing loaded spring simple harmonic motion.</p> <p>CLO 4 Determining the local gravitational acceleration on a mathematical swing.</p> <p>CLO 5 Determining the coefficient of viscosity (coefficient of viscosity) of the liquid, in this case glycerin, by measuring the time the balls fall on in fluid.</p> <p>CLO 6 Determining the surface tension of the liquid</p> <p>CLO 7 Determining the surface tension by the pressure method maximum bubbles and capillary rise.</p> <p>CLO 8 Determining the equivalent number of heat and power, namely the constant Joules.</p> <p>CLO 9 Determining the humidity of a room using hygrometer.</p> | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|--|-----------------------|------------------|-----------------------|--------|---|--------|--|--------------|-----|--|--|--|-----|--|--|--|-----|-------|--|--|--|------|
| <p>Content:</p> | <ol style="list-style-type: none"> 1. Rod Elasticity 2. Simple Harmonic Motion 3. Mathematic Swing 4. Coefficient of Liquidity 5. Surface Voltage I 6. Surface Voltage II 7. Determining The Joule Constant 8. Air Humidity | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Study/exam achievements:</p> | <table border="1" data-bbox="604 1444 1425 1782"> <thead> <tr> <th>No</th> <th>CO</th> <th>Assesment Object</th> <th>Assessment Techniques</th> <th>Weight</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CO 1-9</td> <td>a. Individual assignment b. General skills c. Praktikum final exam</td> <td rowspan="3">Written test</td> <td>30%</td> </tr> <tr> <td></td> <td></td> <td></td> <td>30%</td> </tr> <tr> <td></td> <td></td> <td></td> <td>40%</td> </tr> <tr> <td colspan="4" style="text-align: center;">Total</td> <td>100%</td> </tr> </tbody> </table> | No | CO | Assesment Object | Assessment Techniques | Weight | 1 | CO 1-9 | a. Individual assignment b. General skills c. Praktikum final exam | Written test | 30% | | | | 30% | | | | 40% | Total | | | | 100% |
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| Total | | | | 100% | | | | | | | | | | | | | | | | | | | | |
| <p>Media</p> | <p>Laboratory equipment, Projectors, Practical videos, LMS (MsTeams or Alkana)</p> | | | | | | | | | | | | | | | | | | | | | | | |

