<table>
<tr><td colspan="2">  </td><td colspan="4">Faculty of Natural Sciences and Mathematics
Chemistry Department
Chemistry Education Study Program</td></tr>
<tr><td colspan="2">Module name</td><td colspan="4">Physical labwork</td></tr>
<tr><td colspan="2">Module level, if applicable</td><td colspan="4">1st Year</td></tr>
<tr><td colspan="2">Code, if applicable</td><td colspan="4">SPK – 102</td></tr>
<tr><td colspan="2">Semester(s) in which the module is taught</td><td colspan="4">1st semester</td></tr>
<tr><td colspan="2">Person responsible for the module</td><td colspan="4">Artina Diniaty, S.Pd.Si., M.Pd.</td></tr>
<tr><td colspan="2">Lecturer</td><td colspan="4">Artina Diniaty, S.Pd.Si., M.Pd.</td></tr>
<tr><td colspan="2">Language</td><td colspan="4">Indonesia</td></tr>
<tr><td colspan="2">Relation to curriculum</td><td colspan="4">Compulsory</td></tr>
<tr><td>Teaching methods</td><td>Class size</td><td>Forms of active participation</td><td colspan="3">Workload 45 hours</td></tr>
<tr><td rowspan="2">Practicum</td><td rowspan="2">20-25</td><td rowspan="2">Laboratory work, discussion</td><td>Laboratory work: 170 (min) x 6 (meeting)</td><td>17 hours</td></tr>
<tr><td>Preparation: 200 (min) x 6+ 200 (min)
Exam: 180 (min) +120 (min)</td><td>28hours</td></tr>
<tr><td colspan="2">ECTS Credit</td><td colspan="4">1.61</td></tr>
<tr><td colspan="2">Credit points</td><td colspan="4">1 SCU</td></tr>
<tr><td colspan="2">Requirements according to the examination regulations</td><td colspan="4">Student must follow all the series of practicum activities. Violation of this will result in giving an E value (failing practicum).
Student who do not participate in the practicum for 3 (three) times without justified reasons may not attend the next practicum and are considered to have resigned from the practicum.
Student who for some reason cannot follow the practicum according to the predetermined schedule can apply for inhal practicum. Inhal costs are determined by the laboratory.
Student who inhal allowed for a student a maximum of 3 (three) times.
Student who have not completed laboratory expenses such as tools, materials or tasks (if any) within a certain time will be given a K or F value.</td></tr>
<tr><td colspan="2">Recommended prerequisites</td><td colspan="4">N/A</td></tr>
<tr><td colspan="2">Related course</td><td colspan="4">Physics</td></tr>
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<tr><td>Module objectives/intended learning outcomes</td><td colspan="3">On successful completion of the course students should be able to:
1. Conduct practical activities by paying attention to aspects of work safety and security (K3)
2. Evaluate practical activities
3. Explain basic theoretical physics concepts</td></tr>
<tr><td>Content</td><td colspan="3">• Error calculation technique,
• Thermometer calibration,
• Density of solid,
• Lens and refractive index,
• Conductivity of electrolyte solution, Viscosity of liquid, Surface tension</td></tr>
<tr><td rowspan="5">Study and examination requirements and forms of examination</td><td colspan="3">Final score (NA) is calculated as follows:</td></tr>
<tr><td>Intended learning outcomes</td><td>Weight (%)</td><td>Technique of assessment</td></tr>
<tr><td>1</td><td>35</td><td>Non test: performance observation</td></tr>
<tr><td>2</td><td>30</td><td>Non test: lab work report</td></tr>
<tr><td>3</td><td>35</td><td>Written test (pretest, posttest)</td></tr>
<tr><td>Media employed</td><td colspan="3">Basic physics laboratory equipment</td></tr>
<tr><td>Reading list</td><td colspan="3">Tim Penyusun, 2017, Modul Praktikum Fisika Dasar I, Yogyakarta: Laboratorium Fisika Dasar, UII.
Giancoli, D., 2001, Fisika Edisi kelima Jilid I, Jakarta: Erlangga.</td></tr>
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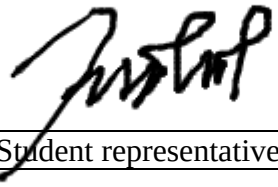
Prepared by:	Verified by:	Authorized by:
		
Person responsible for the module	Student representative	Coordinator Program