Module Handbook

Module's Name	Basic Physics Practicum 1
Module's Grade	Undergraduate Program (S-1)/Bachelor
Abbreviation /code (if any)	
Subtitles (if any)	
Courses included in the module (if any)	
Semester/year	1/1st year
Module Coordinator	Nugrahani Primary Putri, M.Si
Lecturer	Nugrahani Primary Putri, M.Si Abu Zainuddin, M.Pd. Mukhayyarotin Niswati Rodliyatul Jauhariyah, M.Pd. Nurita Apridiana Lestari, M.Pd. Dr. Binar Kurnia Prahani, M.Pd.
Language used	Indonesian
Classification in the curriculum	Compulsory course/~~elective course~~
Learning format/number of class hours per week	Per week consists of: 3 hours face to face (1 hour face to face = 50 minutes/hour)
Workload	3x50 minutes face to face, 3x60 minutes structured tasks, 3x60 minutes independent learning, for 14 weeks, a total of 126 hours face-to-face/semester
CU	1
Precondition course	
Learning Outcome	Knowledge: 1. Students master classical physics knowledge to identify the properties of a simple physical system. Skill: 2. Students are able to correlate physics knowledge with the problems of a simple physical system to design and conduct basic physics experiments using scientific methods. Competence: 1. Students are able to communicate ideas, thought and results of basic physics practicum effectively, both orally and in writing.
Content	This course examines simple physics experiments at the basic level that are correlated with knowledge of physics. In the Basic Physics Practicum course 1, students will study uncertainty in measurement, density of solids, moment of inertia of pulleys, Newton's second law, mathematical pendulum, spring constant, pulley system, viscosity of liquid, sound wave resonance, thermometer detection, heat capacity calorimeter, and the heat of melting ice. Giving practicum is expected to strengthen students' understanding of physical phenomena related to kinematics, dynamics, waves and thermodynamics. After participating in this practicum course, students can understand the limitations of measurement tools and calculate measurement errors that occur, and can understand the concepts of mechanics and thermodynamics through the teaching aids used during the practicum. Students are also expected to see the relationship between theory and practice in general
Attribut soft skill	Team work

<table>
<tr><td>Assessment of CLO/exam</td><td>Students are considered competent and pass if they get at least a minimum test score of 68 (Mid and Final), and structured activities (assignments/T) and participatory activities (P)
The final grade (NA) is calculated according to the formula:
$NA = \frac{(2xP)+(3xT)+(2xMid)+(3xFinal)}{10}$
Convert the 0-100 scale value to a 0-4 scale and the letters are arranged as follows.

<table>
<tr><th>Alphabet</th><th>Score</th><th>Interval</th></tr>
<tr><td>A</td><td>4,00</td><td>85 ≤ A < 100</td></tr>
<tr><td>A-</td><td>3,75</td><td>80 ≤ A- < 85</td></tr>
<tr><td>B+</td><td>3,50</td><td>75 ≤ B+ < 80</td></tr>
<tr><td>B</td><td>3,00</td><td>70 ≤ B < 75</td></tr>
<tr><td>B-</td><td>2,75</td><td>65 ≤ B- < 70</td></tr>
<tr><td>C+</td><td>2,50</td><td>60 ≤ C+ < 65</td></tr>
<tr><td>C</td><td>2,00</td><td>55 ≤ C < 60</td></tr>
<tr><td>D</td><td>1,00</td><td>40 ≤ D < 55</td></tr>
<tr><td>E</td><td>0,00</td><td>0 ≤ E < 40</td></tr>
</table>
</td></tr>
<tr><td>Media</td><td>Guidebook
e-book</td></tr>
<tr><td>Reference</td><td>1. N P Putri and N Suprapto, 2019, Handbook for Basic Physics Practicum 1, Unesa, Surabaya.
2. Armintage, 1983, Practical Physic, John Murray
3. Darmawan B.D, 1984. Teori Ketidakpastian Menggunakan SI, Penerbit ITB , Bandung
4. D. Halliday, R. Resnick, J. Walker, 2013, Fundamental of Physics, 10th Edition. Wiley.</td></tr>
<tr><td>Note</td><td></td></tr>
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