

## Module Handbook

Courses	Basic Physics II
Programme	S1 Physics Education
Code	
Semester	2
Group of Course Coordinator	Dr. Z.A. Imam Supardi, M.Si
Lecturers	<ol style="list-style-type: none"> <li>1. Dr. Z.A. Imam Supardi, M.Si</li> <li>2. Dra. Suliyannah, M.Si</li> <li>3. Diah Hari Kusumawati, M.Si</li> <li>4. Drs. Dwikoranto, M.Pd</li> <li>5. Nugrahani Primary Putri, M.Si</li> <li>6. Dr. Titin Sunarti, M.Si.</li> <li>7. Mukhayyarotin Niswati Rodliyatul Jauhariyah, M.Pd.</li> <li>8. Utama Alan Deta, S.Pd., M.Pd., M.Si.</li> <li>9. Dr. Binar Kurnia Prahani, M.Pd.</li> </ol>
The language used	Indonesian
Classification in the curriculum	Compulsory Courses
Learning format / number of class hours per week	Per-week consists of: 3 hours face to face (1 hour face to face = 50 minutes)
Load	3 hours face to face, 3 hours structured assignments, 3 learn to be independent per-week, for 15 weeks = a total of 135 hours face-to-face / semester
credit	3
Precondition	
Course Learning Outcome	<ol style="list-style-type: none"> <li>1. Be able to explain basic concepts and principles of static/dynamic magnetic electricity, wave and optics and modern physics</li> <li>2. Mastering the material, structure, and concepts of physical science and its application in technology</li> <li>3. Using basic physics concepts and proper mathematical methods to get solutions to quantitative problems in physics.</li> <li>4. Able to work in groups in the discussion process related to the mechanics and thermodynamics concepts that are being discussed during the lesson</li> </ol>
Courses content	The study of Electric field, Gauss law, electric potential, capacitance and dielectric, current and resistance, direct current circuit, magnetic field source magnetic field, Faraday law, inductance, alternating current circuit, electromagnetic waves, geometric optics, light wave interference, diffraction and polarized waves
Attributed soft skill	scientific report public speaking team work

<p>Learning achievement (assesment)</p>	<p>Students are considered competent and pass if they get at least a minimum test score of 68 for mid test (SS) and final exam (S) , assignment (A), and participation (P), where the final grade (FG) is calculated following the formula:</p> <p style="text-align: center;"><b>Final Grade of the course (FG)= 20% P + 30% A + 20% SS + 30% S</b></p> <p>Convert the 0-100 scale value to a 0-4 scale and the letters are arranged as follows:</p> <table border="1" data-bbox="565 485 1320 821"> <thead> <tr> <th>Letters</th> <th>Number</th> <th>Interval</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>4,00</td> <td>85 ≤ A &lt; 100</td> </tr> <tr> <td>A-</td> <td>3,75</td> <td>80 ≤ A- &lt; 85</td> </tr> <tr> <td>B+</td> <td>3,50</td> <td>75 ≤ B+ &lt; 80</td> </tr> <tr> <td>B</td> <td>3,00</td> <td>70 ≤ B &lt; 75</td> </tr> <tr> <td>B-</td> <td>2,75</td> <td>65 ≤ B- &lt; 70</td> </tr> <tr> <td>C+</td> <td>2,50</td> <td>60 ≤ C+ &lt; 65</td> </tr> <tr> <td>C</td> <td>2,00</td> <td>55 ≤ C &lt; 60</td> </tr> <tr> <td>D</td> <td>1,00</td> <td>40 ≤ D &lt; 55</td> </tr> <tr> <td>E</td> <td>0,00</td> <td>0 ≤ E &lt; 40</td> </tr> </tbody> </table>	Letters	Number	Interval	A	4,00	85 ≤ A < 100	A-	3,75	80 ≤ A- < 85	B+	3,50	75 ≤ B+ < 80	B	3,00	70 ≤ B < 75	B-	2,75	65 ≤ B- < 70	C+	2,50	60 ≤ C+ < 65	C	2,00	55 ≤ C < 60	D	1,00	40 ≤ D < 55	E	0,00	0 ≤ E < 40
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<p>Media form</p>	<ol style="list-style-type: none"> <li>1. File ppt</li> <li>2. File e-book</li> </ol>																														
<p>References</p>	<ol style="list-style-type: none"> <li>1. Halliday &amp; Resnick, 2007, <i>Fisika Jilid 1</i>, Erlangga</li> <li>2. Serway, R.A., and Jewett, J.W., 2010, <i>Physics for Scientists and Engineers with Modern Physics</i>, Salemba Teknika</li> <li>3. Bueche, F.J., 2000, <i>Schaum's Outline of College Physics</i>, McGraw-Hill.</li> </ol>																														
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