# SYNERGY SCHOOL OF ENGINEERING, DHENKANAL
## LESSON PLAN FOR APPLIED PHYSICS LAB [PR-2]

| **Discipline:** All Branches | **Session:** 2026-27 | **Name of teaching faculty:** Ms. Sushree Sangita Satapathy & Dr. Santanu Kumar Nayak |
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| **Subject:** Applied Physics lab | **No. of days/ Per week class allotted:** 1 | Date of commencement: 17/08/2026 To |
| **Week** | **Class day** | **Theory topics** |
| 1 | 1 | Demo class |
| 2 | 2 | To measure length, radius of a given cylinder, a test tube and a beaker using a Vernier caliper and find volume of each object. |
| 3 | 3 | To measure length, radius of a given cylinder, a test tube and a beaker using a Vernier caliper and find volume of each object. |
| 4 | 4 | To measure length, radius of a given cylinder, a test tube and a beaker using a Vernier caliper and find volume of each object. |
| 5 | 5 | To determine diameter of a wire, a solid ball and thickness of card board using a screw gauge. |
| 6 | 6 | To determine diameter of a wire, a solid ball and thickness of card board using a screw gauge. |
| 7 | 7 | To determine diameter of a wire, a solid ball and thickness of card board using a screw gauge. |
| 8 | 8 | To determine radius of curvature of a convex and a concave mirror/surface using a spherometer. |
| 9 | 9 | To determine radius of curvature of a convex and a concave mirror/surface using a spherometer. |
| 10 | 10 | To determine force constant of a spring using Hooke's Law. |
| 11 | 11 | To determine force constant of a spring using Hooke's Law. |
| 12 | 12 | To find the viscosity of a given liquid (Glycerin) by Stoke's law. |
| 13 | 13 | To find the viscosity of a given liquid (Glycerin) by Stoke's law. |
| 14 | 14 | To verify laws of reflection from a plane mirror/interface. |
| 15 | 15 | To verify laws of reflection from a plane mirror/interface. |
| 16 | 16 | To verify laws of reflection from a plane mirror/interface. |
| 17 | 17 | To verify laws of refraction (Snell's law) using a glass slab. |
| 18 | 18 | To verify laws of refraction (Snell's law) using a glass slab. |
| 19 | 19 | To verify laws of refraction (Snell's law) using a glass slab. |
| 20 | 20 | To verify triangle and parallelogram law of forces. |
| 21 | 21 | To verify triangle and parallelogram law of forces. |
| 22 | 22 | To verify Ohm's law plotting graph between current and potential difference. |
| 23 | 23 | To verify Ohm's law plotting graph between current and potential difference. |

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| 24 | 24 | To verify laws of resistances in series and parallel combination. |
| 25 | 25 | To verify laws of resistances in series and parallel combination. |
| 26 | 26 | To convert a galvanometer into an ammeter. |
| 27 | 27 | To convert a galvanometer into an ammeter. |
| 28 | 28 | To convert a galvanometer into a voltmeter. |
| 29 | 29 | To convert a galvanometer into a voltmeter. |
| 30 | 30 | To draw V-I characteristics of a semiconductor diode (Ge, Si) and determine its knee voltage. |
| 31 | 31 | To draw V-I characteristics of a semiconductor diode (Ge, Si) and determine its knee voltage. |
| 32 | 32 | To draw V-I characteristics of a semiconductor diode (Ge, Si) and determine its knee voltage. |

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Prepared By

04/08/26.

Principal

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HOD, Physics