**Course Log Template**

**Name of Instructor: Awais Ahmad**

**Course Code: PHY-106 Course Title: Applied Physics**

| **Sr. No** | **Date** | **Duration** | **Topics Covered** | **Evaluation Instruments Used** | **Signature** |
| --- | --- | --- | --- | --- | --- |
| 1 | 08-JUN-21 | 1:30 hrs. | Introduction ,Electric Charge, Particles, Atoms, |  |  |
| 2 | 08-JUN-21 | 1:30 hrs. | Removal of electrons, Conductors, semiconductors, insulators, Superconductors |  |  |
| 3 | 15-JUN-21 | 1:30 hrs. | Conservation of charge and Examples Charge quantization Examples |  |  |
| 4 | 15-JUN-21 | 1:30 hrs. | Coulombs Law |  |  |
| 5 | 22-JUN-21 | 1:30 hrs. | Problems |  |  |
| 6 | 22-JUN-21 | 1:30 hrs. | Electric fields ,Different charge configurations , Superposition principle |  |  |
| 7 | 29-JUN-21 | 1:30 hrs. | Point charge and lines of force.  Ring of charge and related examples |  |  |
| 8 | 29-JUN-21 | 1:30 hrs. | Disk of charge and related examples  A point charge in an electric field, Dipole in a n electric field and related examples |  |  |
| 9 | 06-JUL-21 | 1:30 hrs. | Problems |  |  |
| 10 | 06-JUL-21 | 1:30 hrs. | The flux of electric field, Gauss’Law |  |  |
| 11 | 13-JUL-21 | 1:30 hrs. | Applications of Gauss’s Law |  |  |
| 12 | 13-JUL-21 | 1:30 hrs. | Applications of Gauss’s Law |  |  |
| 13 | 27-JUL-21 | 1:30 hrs. | Problems |  |  |
| 14 | 27-JUL-21 | 1:30 hrs. | Electric potential energy ,Electric potentials |  |  |
| 15 | 03-AUG-21 | 1:30 hrs. | Calculating the potential from the field Field due to point and continuous charge distribution,Potential due to dipole, equipotential surfaces  Calculating the field from the, Problems |  |  |
| 16 | 03-AUG-21 | 1:30 hrs. | Current and Current density, Drift velocity  Relationship with Electric field and Current density |  |  |
| 17 | 10-AUG-21 | 1:30 hrs. | Introduction to Resistance and Resistivity  Conductivity and related examples  Ohm’s law and its applications with examples |  |  |
| 18 | 10-AUG-21 | 1:30 hrs. | Introduction to Magnetic Field |  |  |
| 19 | 17-AUG-21 | 1:30 hrs. | The Hall effect and related examples |  |  |
| 20 | 17-AUG-21 | 1:30 hrs. | The Biot- Savart law and related examples, Line of B |  |  |
| 21 | 24-AUG-21 | 1:30 hrs. | Amperes’ s Law and related examples |  |  |
| 22 | 24-AUG-21 | 1:30 hrs. | Faraday’s experiments, Faraday’s Law of Induction and related examples |  |  |
| 23 | 31-AUG-21 | 1:30 hrs. | Faraday’s experiments, Faraday’s Law of Induction and related examples |  |  |
| 24 | 31-AUG-21 | 1:30 hrs. | Lenz’s law |  |  |
| 25 | 07-SEP-21 | 1:30 hrs. | Lenz’s law and examples |  |  |
| 26 | 07-SEP-21 | 1:30 hrs. | Problems |  |  |
| 27 | 14-SEP-21 | 1:30 hrs. | Problems |  |  |
| 28 | 14-SEP-21 | 1:30 hrs. | Induced Electric Field |  |  |
| 29 | 21-SEP-21 | 1:30 hrs. | Displacement Current, Maxwell Equations |  |  |
| 30 | 21-SEP-21 | 1:30 hrs. | Ineterference, Reflection and Rarefaction |  |  |

**Instructor Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**