**CONVENT OF MERCY ACADEMY ‘ALPHA’**

**PHYSICS ASSESMENT PLAN**



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| **Subject:**  | **Physics** | **Duration**  |  **14 weeks** |  |
| **Form:**  | **Sixth unit 1** | **Title** | **Mechanics/ Thermal physics** |  |
| **Semester:**  | **ONE**  | **Department** | **Science**  |  |
| **Objectives** | * recall and show understanding of the facts, concepts, models and principles of physics, and the relationships between different topic areas in the curriculum framework;
* apply knowledge, concepts and principles of physics to explain phenomena and observations, and to solve problems;
* demonstrate understanding of the use of apparatus in performing experiments;
* demonstrate understanding of the methods used in the study of physics;
* make decisions based on the examination of evidence using knowledge and principles of physics
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| **SEMESTER ONE** |
| **MODULE** | **TOPICS** | **ASSESSMENT METHODS** | **ADMINISTRATION** | **LEVEL OF COGNITIVE TAXONOMY** | **PROPOSED****DATE** | **SCORING** |
| MECHANICS  | ***Mechanics PART 1***1. Physical quantities
2. SI Units
3. Motion along a straight line
 | **Class work (CW)**Stuctured worksheet | **Individual** | KnowledgeApplicationAnalysisSynthesisEvaluation  | **September 2024** | **15 %** |
|  | 1. Projectile motion
2. Newton’s Laws of motion.
 | **PRACTICAL/PRESENTATION (HW):** | **Group** | KnowledgeApplicationAnalysisSynthesisEvaluation | **October 2024** | **20 %** |
|  | ***Mechanics PART 2***1. Circular motion
2. Gravitation
3. Effects of forces
4. Conservation of Energy
 | **MOTHLY TEST**Module 1: Mechanics  | **Individual**  | KnowledgeApplicationAnalysisSynthesisEvaluation | **October 2024** | **50 %** |
| THERMAL PHYSICS | 1. Design and use of thermometer
2. Thermal properties
3. Heat Capacity
4. Heat transfer
5. The kinetic Theory Gases
 | **Classwork (CW):****Structured questions** | **Individual**  | KnowledgeApplicationAnalysisSynthesisEvaluation | **November 2024** | **15 %** |

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| **Subject:**  | **Physics** | **Duration**  |  **8 weeks** |  |
| **Form:**  | **Sixth unit 1** | **Title** | **Thermal physics/ Waves and oscillasion**  |  |
| **Semester:**  | **Two**  | **Department** | **Science**  |  |
| **Objectives** | * recall and show understanding of the facts, concepts, models and principles of physics, and the relationships between different topic areas in the curriculum framework;
* apply knowledge, concepts and principles of physics to explain phenomena and observations, and to solve problems;
* demonstrate understanding of the use of apparatus in performing experiments;
* demonstrate understanding of the methods used in the study of physics;
* make decisions based on the examination of evidence using knowledge and principles of physics
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| **SEMESTER TWO** |
| **MODULE** | **TOPICS** | **ASSESSMENT METHODS** | **ADMINISTRATION** | **LEVEL OF COGNITIVE TAXONOMY** | **PROPOSED****DATE** | **SCORING** |
| THERMAL PHYSICS | 1. First Law of Thermodynamics
2. Mechanical properties of Materials
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| OSCILLATIONAND WAVE | 1. Harmonic Motion
2. Wave properties 1
3. Wave properties 2
4. Interference
5. Refraction
6. Physics of the ear
7. Physics of the eye
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