

## **PROPOSED LIST OF SUBJECTS AT SENIOR SCHOOL**

### **LESSON DISTRIBUTION AT SENIOR SCHOOL**

The number of lessons in each of the compulsory learning areas shall be 4; while the optional areas shall be 6 lessons each. A lesson shall be 40 minutes. The "free" lessons shall be used for development of ICT skills, Pastoral Instruction Programme (PPI), projects, collaborative study and further reading.

### **ESSENCE STATEMENT**

Physics is a body of knowledge exploring the theories, principles and laws that govern natural phenomena observed in the physical environment. The subject builds on the competencies introduced at Junior Secondary School level under the learning area of Integrated Science. In vision 2030 and sessional papers No. 1 of 2005 and No. 1 of 2019, the importance of science, technology and innovation has been prioritized for human capital development through education and training. Therefore, Physics forms an integral part of the STEM subjects in the Basic Education Curriculum Framework. It employs a scientific methodology of study with an emphasis on experimental approach to investigation, enhancing understanding of fundamental scientific concepts and principles. This leads to the acquisition of knowledge, skills, attitudes and values through precise and accurate scientific processes. The subject provides the learner with opportunities to develop competencies by empowering them to be creative and innovative, leading to independent approaches in problem solving and management of their environment. It also prepares learners for further training and the world of work by providing careers in STEM related pathways. The content will be anchored on Kolb Theory of Experiential Learning and Constructivism theory for teaching and learning.

## **GENERAL LEARNING OUTCOMES**

1. Relate Physics to technology and society to enhance the learner's appreciation of the physical environment.
2. Develop science process skills among learners through the use of appropriate instruments as they discover and explain the order of the physical environment.
3. Apply basic research and scientific skills to manipulate the environment and solve human problems.
4. Develop capacity for critical thinking through basic scientific skills and research in addressing pertinent & contemporary issues affecting the society.
5. Apply the principles of Physics for enhancement of innovations and entrepreneurial skills for development.
6. Use relevant skills and values to promote local and global citizenship for harmonious coexistence and appreciation of diversity in people.
7. Acquire adequate knowledge, skills, values and attitudes to enhance exploitation of individual talents for leisure, self -fulfillment, career growth, and for further education and training.
8. Apply acquired knowledge, skills, values, and attitudes for effective communication and utilization of information in technological advancement.