Grade Level	Course Name	Sylabus Name	Standard Description	Standard Name	Standard Code	Description
Grade 11S	Biology	Functional Characteristics of living things at the cellular level	Biological Identity and Genetic information	The diversity of livinng things and the uniquness of the individual	CH1	activity1, The diversity of living world, Prokaryotes, Eukaryotes, the concept of species. activity2, Polymorphism within a population Morphological polymorphism, biochemical polymorphism activity3, Biological identity of organisms Nuclear transplantation experiment, Nutritional intake activity4, Renewal of cells and maintenance of their characteristics Renewal of blood cells, renewal of epidermal cells. Chapter's exercises
Grade 11S	Biology	Functional Characteristics of living things at the cellular level	Biological Identity and Genetic information	DNA, genetic information and cell cycle	CH2	activiy1, the karyotype, Karyotyping, each species has its own Karyotype activity2, Mitosis, an equal division of the chromosomal set, observation of dividing cells, Schematic representation of mitosis activity3, The structure and the chemical components of chromosomes. activity4, Identical reproduction and cell cycle Chapter2, Exercises.

Grade 11S	Biology	Functional Characteristics of living things at the cellular level	Biological Identity and Genetic information	Protein synthesis and enzymatic activity	CH3	activity1, proteins, an association of amino acids, identification of the chemical constituents of a protein, nature and function of a protein. activity2, The gene, structure and information unit, experiment in producing a transgenic strain, notion of a gene. activity3, transcription, first step of protein synthesis, proving the existence of RNA, messenger RNA, a copy of the gene. activity4, Translation, second step of protein synthesis, tools of translation, mechanism of translation activity5, Fate of synthesized proteins, functional protein, insulin, cell proteins. activity6, enzymes, protein biological catalysts, metabolic activity in bacteria, in vitro digestion of starch activity7, reaction rate and optimum conditions, concentration of substrate, influence of temperature, effect of pH. Chapter3, exercises.
Grade 11S	Biology	Functional Characteristics of living things at the cellular level	Biological Identity and Genetic information	Biological identity and genotype	CH4	activity1, phenotypes and proteins, functional proteins, structural proteins. activity 2, Genes and alleles, modified proteins, genetic mutation and gene polymorphism. activity3, the genotype, phenotype and genotype, biological identity and genetic printing. Chapter4 exercises.