NATIONAL TEACHING COUNCIL

SENIOR HIGH SCHOOL INTEGRATED SCIENCE

CONTENT DEVELOPMENT

CONTENT AREA	COMPETENCE	DESCRIPTIVE STATEMENTS
Nature of science	Understand the nature of science and its application	• Explain the historical development of science • Recognise the various branches of science • Apply scientific methods to solve everyday problems
Life Science	Demonstrate knowledge of the characteristics of living things	• Differentiate between living and non-living things • Describe the structure and function of plant and animal cells • Describe the various organ systems in the human body and explain their functions • Describe plant structure and explain the functions • Describe the modes of transmission, symptoms and modes of control of common diseases
Physical Sciences	i. Understand the properties and characteristics of matter ii. Demonstrate knowledge of acid-base chemistry ii. Demonstrate ability to measure various physical quantities v. Understand the sources and transformation of energy v. Understand force, motion and pressure, and their applications vi. Understand basic electronics	• Explain the diversity of matter and their interactions • Describe acid, base and salt, and their reactions • Measure physical quantities and interconvert physical units • Describe the various types and sources of energy and how they can be transformed from one form to another • Explain Newton's three laws of motion in a variety of situations • Analyse motion in terms of concepts of displacement, velocity and acceleration • Explain pressure, its effects and practical applications • Identify the various components of an electronic circuit
Agricultural Science	Understand cultural practices in agriculture	• Apply key agricultural concepts in the production of crops and farm animals

Environmental Science	Demonstrate knowledge in basic environmental concepts and emerging environmental problems	• Describe the various environmental cycles and implications for the cycling of matter on earth • Explain air mass movement • Analyse ecosystem interactions • Outline the effect of human activities on the atmosphere, water and soil • Describe emerging environmental issues such as climate change, plastic pollution, electronic wastes, among others

DEVELOPING THE TEST BLUEPRINT (SHS INTEGRATED SCIENCE)

	SUBJECT OUTCOMES	DEPTH OF KNOWLEDGE				
CONTENT AREAS		L 1	L 2	L 3	L 4	Total
Nature of Science	Branches of science	1	1			5
	Scientific methods		1	1	1	
Life Science	Living and non-living things	1	1	1	1	35
	Structure and function of plant and animal cells	1	3	3	1	
	Organ systems in the human body	1	3	3	3	
	Plant physiology	1	2	2	2	
	Transmission, symptoms and control of common diseases		1	3	2	
Physical Sciences	Properties and characteristics of matter	1	1	1	1	31
	Acids, bases and salts	1	1	2	1	
	Measurement of physical quantities	1	1	1	1	
	Types, sources and transformation of energy	1	1	3	1	
	Laws of motion, displacement, velocity and acceleration	1		2	2	
	Pressure, its effects and application	1	2	1	1	
	Electronic circuit		1		1	
Agricultural Science	Production of farm animals	1	1	2	1	10
	Production of crops		1	2	2	
Environmental Science	Environmental cycles	1		1	1	19
	Air mass movement		1		1	
	Interactions in the ecosystem	1	1		1	
	Effects of human activities on air, water and soil quality	1	1	1	3	
	Emerging environmental issues such as climate change, plastic pollution, and electronic waste, among others		1	1	3	
Total		**15**	**25**	**30**	**30**	**100**