

Course Outline

Department: Bilingual Name of Subject: Science in English Code : 16201

Teacher's name : Ms. Ritchelle Sacwog Lamayo

Level ;

Primary 6 Secondary/.... 1st - 2nd Semester / 2014

Subject :

Main Subject Optional Subject Development Activities for Students Others

1) Course Description

Science in English is a course expected to cover many basic subjects in Science through the English medium. The subjects covered in the course developed for Primary 6 include 8 major topics and 30 minor topics. The course aims to develop scientific processing skills, evoke scientific curiosity, instill higher order thinking skills, develop manipulative ability, enhance application of knowledge in everyday situations, build an up-to-date knowledge base and develop examination skills. The attainment of these skills will lead to the development of good scientific attitudes among the students.

Grade-Level Indicators (The Basic Education Core Curriculum)

1. Understand structure and function of various systems of living things and relationships among diverse living things in different environments.
2. Understand properties and distribution of groups of materials; states of substances; properties of substances and causing change in substances; substances in daily life; simple methods of separating substances.
3. Understand effects of force acting on objects; pressure; basic principles of buoyancy; properties and basic phenomena of light, sound and electrical circuits.
4. Understand characteristics, components and properties of the Earth's surface and atmosphere; relationship between the sun, Earth and the moon, which affects natural phenomena.

5. Pose questions about what is to be learned; give estimates of several possible answers; plan, investigate and verify by applying tools and devices; analyse data and communicate knowledge obtained from investigation and verification.
6. Apply scientific knowledge and processes in life and search for additional knowledge; implement projects or tasks as prescribed or in accord with their interests.
7. Show interest, determination, responsibility, care and honesty in seeking knowledge.
8. Are aware of the value of knowledge of science and technology; show appreciation, honour and respect of inventors' rights to their achievements.
9. Show recognition, care and concern as evident in conscientious behaviour for utilization, protection and conservation of natural resources and the environment.
10. Work constructively with others; be ready to express their opinions and recognise views of others.

2) Learning Objectives (1st Semester)

Indicators of Semester	In accordance with government curriculum
1. classify organisms based on their characteristics	
2. identify the factors that affect the survival of an organism	
3. recognize when an environment becomes unfavorable, some organisms adapt and survive while others die or move to new environments	
4. classify materials according to their characteristics and uses.	

3) Analyze the course description to be the contents for teaching. (1st Semester)

Contents (Strand)/ Standards	Indicators	Units of learning / Amounts of Periods	Teaching Materials	How to Evaluate		Maximum marks
				Evaluations	Tools	
.....	1. classify	UNIT 1: Classification of	1. PowerPoint	1. exercise	1.worksheets	50

.....	organisms based on their characteristics	Organisms (10 periods) 1.Introduction 2.Kingdom Monera 3.Kingdom Protista 4.Kingdom Fungi 5.Kingdom Plantae 6.Kingdom Animalia	Presentation 2. Realia 3. Instructional video Clips	2. written test 3. open response test	2. test papers 3. class questions 4. notes checking	
..... ...	2. identify the factors that affect the survival of an organism 3.recognize when an environment becomes unfavorable, some organisms adapt and survive while others die or move to new environments	UNIT 2: The Environment (10 periods) 1. Introduction 2. Environment 3. Observing and Describing a Local Environment 4. Interacting Factors within an Environment 5. Factors that Affect the Survival of an Organism 6. Unfavorable Environments - Adaptation 1. Introduction 2. Plant Adaptation 3. Animal Adaptation	1. PowerPoint Presentation 2. Realia 3. Instructional video Clips	1. exercise 2. written test 3. open response test	1.worksheets 2. test papers 3. class questions 4. notes checking	35
..... ...	3. classify materials according to their characteristics and uses.	Unit : 3 Classification of Materials (5 periods) 1.Introduction 2.Properties of Materials and Their Uses	1. PowerPoint Presentation 2. Realia 3. Instructional video Clips	1. exercise 2. written test 3. open response test	1.worksheets 2. test papers 3. class questions 4. notes	15

		3. Classifying Materials and Testing Their Properties	4. Demonstration Kits		checking	
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4) Contents of subjects

1st Semester

Time Duration	Subject Contents
Beginning of the session – Mid-term	UNIT 1: Classification of Organisms <ol style="list-style-type: none"> 1. Introduction 2. Kingdom Monera 3. Kingdom Protista 4. Kingdom Fungi 5. Kingdom Plantae 6. Kingdom Animalia
Post – Midterm – Final	UNIT 2: The Environment <ol style="list-style-type: none"> 1. Introduction 2. Environment 3. Observing and Describing a Local Environment 4. Interacting Factors within an Environment 5. Factors that Affect the Survival of an Organism 6. Unfavorable Environments <ul style="list-style-type: none"> - Adaptation <ol style="list-style-type: none"> 1. Introduction 2. Plant Adaptation 3. Animal Adaptation UNIT 3: Classification of Materials

	1. Introduction 2. Properties of Materials and Their Uses 3. Classifying Materials and Testing Their Properties
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5) Evaluation

Average marks for evaluation

Authentic Assessment: Written / Practical Exam = ...70..... : ...30.....

Evaluation of Learning Objectives

Semester	Learning Objectives (Items)
1	Items 1-4

6) Details of Evaluation

1st Semester/2014

Pre-test marks: 35 Marks (Authentic Assessment)

Learning Objectives (Items)	Criteria Followed for Assessment	Maximum marks
1	- Illustration, Activity - Worksheets	15 20

Mid-term marks: 15 Marks (Written/Practical Exam)

Learning Objectives (Items)	Criteria Followed for Assessment	Maximum marks
1	- Multiple Choice, Matching Type, Enumeration Identification	15

Post-Test marks : 35 Marks (Authentic Assessment)

Learning Objectives (Items)	Criteria Followed for Assessment	Maximum marks
2	- Worksheets, Activity, Illustration	15
3	- Picture Analysis, Essay, Illustration	10
4	- Worksheets, Assignments	10

Portfolio : 20 Marks

Learning Objectives (Items)	Criteria Followed for Assessment	Maximum marks
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Final marks : 15 Marks (Written/Practical Exam)

Learning Objectives (Items)	Criteria Followed for Assessment	Maximum marks
2,3,4	- Multiple Choice, Matching Type, Illustration, Picture Analysis	15

2nd Semester/2014

7) Learning Objectives (2nd Semester)

Indicators of Semester	In accordance with government curriculum
5. show and become aware that energy from most of the energy resources is indirectly derived from the Sun	

6. understand the effects of force	
7. be able to give examples of human impact (both positive and negative) on the environment	
8. recognize that an object can be seen when it reflects light or when it is a source of light	
9. differentiate between heat and temperature	

Contents of subjects

2nd Semester

Time Duration	Subject Contents
Beginning of the session – Mid-term	<ul style="list-style-type: none"> - Energy <ol style="list-style-type: none"> 1. Introduction 2. Source of Energy 3. Conversion of Energy - Forces <ol style="list-style-type: none"> 1. The Effects of a Force 2. Different Types of Forces
Post – Midterm – Final	<ul style="list-style-type: none"> - Humans and their Environment <ol style="list-style-type: none"> 1. Effects of Human Activities on the Environment 2. Influences of Human Interaction with the Environment on the Development of Science and Technology 3. Artificial (Human-made) Materials - Light

	<ul style="list-style-type: none"> 1.Sources of Light 2.How Do you See Things 3.Light Travels in Straight Lines 4.Shadows - Heat <ul style="list-style-type: none"> 1.Sources of Heat 2.Temperature 3.Heat Flow 4.Expansion and Contraction 5.Heat Conduction
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Evaluation

Average marks for evaluation

Authentic Assessment: Written / Practical Exam = ...70..... : ...30.....

Evaluation of Learning Objectives

Semester	Learning Objectives (Items)
2	5-9

Details of Evaluation

Pre-test marks: 35 Marks (Authentic Assessment)

Learning Objectives (Items)	Criteria Followed for Assessment	Maximum marks
5	- Identify the forms of Energy	20
6	- Enumerate the different Types of Forces	15

Mid-term marks : 15 Marks (Written/Practical Exam)

Learning Objectives (Items)	Criteria Followed for Assessment	Maximum marks
5	- Fill in the Blanks	5
6	- Multiple Choice	10

Post-Test marks : 35 Marks (Authentic Assessment)

Learning Objectives (Items)	Criteria Followed for Assessment	Maximum marks
7	- Activity, Worksheets, Oral Presentation	20
8	- Illustration, Worksheets	10
9	- Give the Differences between Heat and Temperature	5

Portfolio : Marks

Learning Objectives (Items)	Criteria Followed for Assessment	Maximum marks
.....	-

Final marks : 15 Marks (Written/Practical Exam)

Learning Objectives (Items)	Criteria Followed for Assessment	Maximum marks
7,8,9	- Multiple Choice, Labeling Parts, Enumeration, Illustration	15