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| Course Title: | |
| Head of Department: | K.Bussy Al-Gabban |
| Teacher(s) + e-mail: | Elham Eldabagh Bahaeldin - elham@greenwood.sch.ae Marwa Hafez - marwa.h@greenwood.sch.ae Hiba Abu Zahra- hiba@greenwood.sch.ae Hala Hussam Eddin Jarrar - hala.j@greenwood.sch.ae Ruba N. El Khalidi - ruba.k@greenwood.sch.ae |
| Cycle/Division: | kindergarten |
| Grade Level: | kindergarten |
| Credit Unit: | NA |
| Duration: | One academic year |
| Course Prerequisites: | NA |

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| <u>Department's Vision:</u> | <ul style="list-style-type: none"> • To create a safe and creative learning environment for our young learners. • To provide with experiences that will enrich the students' learning. |
| <u>Department's Mission:</u> | <ul style="list-style-type: none"> • To create responsible leaders and role-models that will take action to show respect for the planet and all living forms. • To provide with hands-on activities which students can relate to in their daily lives. |

COURSE DESCRIPTION:

Hands-on activities that focus on the science ideas and develop the students' inquiry skills.

GENERAL COURSE LEARNING OBJECTIVES:

- Physical Sciences
- Life Sciences
- Earth and Space Sciences
- Engineering, Technology, and Applications of Science

I.

STANDARDS/BENCHMARKS:

- ❖ K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.
- ❖ K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.
- ❖ K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.
- ❖ K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.
- ❖ K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.
- ❖ K-ESS3-1 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.
- ❖ K-PS3-2 Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.
- ❖ K-PS3-1 Make observations to determine the effect of sunlight on Earth's surface.
- ❖ K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
- ❖ K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.
- ❖ K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.
- ❖ K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.
- ❖ K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

II.

RESOURCES:

- ✓ Educational visits planned that are linked to the topics
- ✓ Hands-on activities
- ✓ Stories and classroom discussions
- ✓ Flashcards
- ✓ Videos and images
- ✓ tablets

III.

COURSE OUTLINE:

Semester 1:

| <u>topics</u> | <u>Chapter</u> | <u>Lesson(s)</u> |
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| Pre-assessment | | <ul style="list-style-type: none"> • Introduce classroom rules and use of tools |
| HyieGINE | | <ul style="list-style-type: none"> • Basic hyieGINE routines. |
| My senses | | <ul style="list-style-type: none"> • How we use our five senses. |
| Body parts | | <ul style="list-style-type: none"> • Name different body parts and their function. |
| Adult and baby animals | | <ul style="list-style-type: none"> • To match baby animals to adult animals. • To recognize and name different animals |
| What people/animals eat | | <ul style="list-style-type: none"> • To understand and recognize the diet of humans and animals. |
| Butterfly life cycle | | <ul style="list-style-type: none"> • To understand the sequence of a butterfly's life. |

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| Seasons | | <ul style="list-style-type: none"> To understand the sequence of the seasons and to be able to describe them. |
| From farm to fork | | <ul style="list-style-type: none"> To understand that what we eat comes from either plants or animals from the farm. |
| State of matter | | <ul style="list-style-type: none"> Identify matter as solid, liquid, gas. |
| Desert life | | <ul style="list-style-type: none"> To be able to identify some of the local animals in the UAE. |
| Wild animals | | <ul style="list-style-type: none"> To recognize and name some animals in the wild. |
| Bugs | | <ul style="list-style-type: none"> To recognize and classify bugs. |
| Ocean life | | <ul style="list-style-type: none"> To identify and name animals living in the ocean. |
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Semester 2:

| Topics | Chapter | Lesson(s) |
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| Forces experiment | | <ul style="list-style-type: none"> To understand the different directions of the motions and the force required to change the speed of an object. |
| Physical health | | <ul style="list-style-type: none"> To recognize ways to maintain a good physical health. |
| Explore magnets | | <ul style="list-style-type: none"> To observe and describe how magnets react to objects made of iron and steel. |
| Explore shadows | | <ul style="list-style-type: none"> Explore how light can give and change our shadows. |
| Simple machines | | <ul style="list-style-type: none"> Recognize common machines and their function. |
| Build structure | | <ul style="list-style-type: none"> To be able to work in small groups to build a structure. |
| Planting | | <ul style="list-style-type: none"> To understand that plants need light, soil, water and air. |
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IV.

GRADING:



Grading Policy/ Assessment Tools:

- Observation sheets
- Journals

Grade Distribution:

| <u>Term -1- & Term 2</u> | |
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| <ul style="list-style-type: none">• Checklist• Journals• Report card | |

Cross-Curricular Project(s):

- Science fair
- Book fair
- Educational School trips