



## **Science**

### **COURSE SYLLABUS**

**GRADE LEVEL:** Pre-Kindergarten

**SCHOOL YEAR:** 2023 - 2024

**TEACHER:** Ms. Vivian Lee

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#### **COURSE DESCRIPTION:**

The curriculum for Kindergarten Science is based on NGSS standards, which provide lessons that fulfill children's natural cravings for things around them. It builds the basic science skills, like observation, measurement, comparison and classification for children. We begin our learning journey by introducing topics that are at their level, such as My Five Senses, Plants I Can Eat and Our Sky. In conjunction with our SLOs and DIS's VISION MISSION, to provide children with fun and practical learning experience. Kindergarten Science studies of the weather, plants, animals, and nature, which will provide children with stimulation on topics they are eager to learn. We teach children methods to investigate the world, make sense of their findings, and time to learn about how their world works. By using our kindergarten Science program, we foster children's development of science knowledge and lead them on a lifelong journey of inquiry.

#### **COURSE OBJECTIVES:**

By the end of the course, students should be able to:

- Identify and describe the five senses.
- Use the five senses to learn about the word.
- Identify the sensory organ associated with each sense.
- Observe many properties of one thing.
- Classify things as living and nonliving.
- Describe characteristics of living things.
- Describe characteristics of nonliving things.
- Sort out living and nonliving things.
- Compare animals by size, shapes, or body coverings.
- Identify ways animal moves.
- Observe and illustrate what an animal needs.
- Recognize that animals need food, water, air and shelter to survive.
- Compare the similarities between the needs of humans and animals.
- Describe an animal's life cycle.
- Sequence pictures to show how animals grow and change.
- Understand that animals and plants can be found in different habitats and environments.
- Know that animals need food, water, shelter, and space to live.
- Describe different environments where animals and plants live.
- Identify the movement of the objects by using pushes and pulls.
- Describe different kinds of weather.
- Identify the differences between daytime and nighttime.

- Understand ways they can help keep the Earth clean.
- Identify the materials that can be recycled.

### **ASSESSMENT:**

- Oral assessment:
  - After each lesson, students' ability of answering topic related questions would be count as part of the oral assessment.
  - At the end of each unit, the ability to point out and elaborate on the flash cards that represent the key vocabularies of the unit will be another oral assessment.
- Check list:
  - A checklist made according to the standards will be use to assess children's understand after each unit.
- Observation:
  - Teacher does a spontaneous in class observation as a major identification of children's understanding of the topic.
- Written assessment:
  - At the end of each semester, a written exam will be in place.

### **PRIMARY TEXTBOOK & OTHER RESOURCES**

Hackett, J., Keeley, P., Moyer, R., Vasquez, J. A., Zike, D., & Fisher, D. (2020). *Inspire Science: Early Learners*. McGraw-Hill Education.

Shanahan, T., Fisher, D., & Walker-Dalhouse, D. (2017). *World of Wonders: Developing Early Learners*. McGraw-Hill Education.

### **ADDITIONAL INFORMATION**

Please see Google Classroom for more information.

**Academic Dishonesty** means employing a method or technique or engaging in conduct in an academic endeavor that contravenes the standards of ethical integrity expected at DIS. Academic dishonesty includes but is not limited to, the following:

1. Purposely incorporating the ideas, words of sentences, paragraphs, or parts thereof without appropriate acknowledgment and representing the product as one's own work; and
1. Representing another's intellectual work such as photographs, paintings, drawings, sculpture, or research or the like as one's own, including failure to attribute content to an AI.
2. Employing a tutor, making use of Artificial Intelligence without acknowledgement, getting a parent to write a paper or do an assignment, paying for an essay to be written by someone else and presented as the student's own work.
3. Committing any act that a reasonable person would conclude, when informed of the evidence, to be a dishonest means of obtaining or attempting to obtain credit for academic work.

**Any act of academic dishonesty will result in an automatic zero on the entire assignment**

## **1st QUARTER – TENTATIVE COURSE CONTENT**

<i>(NB: Depending on time and interest, the teacher may delete and/or add other selections.)</i>	
<b>Week / Date</b>	<b>Topic / Projects / Assessments</b>
<b>Week 1</b> <b>Aug 10<sup>th</sup> to 11<sup>th</sup></b> <b><u>Only 2 School Days</u></b> <i>10 ~ First Day / Orientation Day</i>	Orientation Welcome to K1 Getting Children ready for the upcoming year!
<b>Week 2</b> <b>Aug 14<sup>th</sup> to 18<sup>th</sup></b> <i>15 ~ Opening Mass</i>	Observe Your World Inquiry activity: - Describe materials - Encourage children to observe materials with a hand lens. - Use different tools to measure objects
<b>Week 3</b> <b>Aug 21<sup>st</sup> to 25<sup>th</sup></b>	Our 5 Senses: - Introduce the 5 senses - eye, nose, hand, tongue, ear - The 5 senses song Game: Use your senses to sort.
<b>Week 4</b> <b>Aug 28<sup>th</sup> to Sep 1<sup>st</sup></b>	Review 5 senses Game: - I spy (using our sight) - Compare and sort Song: - Five Senses song - Fuzzy Suzy
<b>Week 5</b> <b>Sep 4<sup>th</sup> to 8<sup>th</sup></b> <i>8 ~ Holy Mass &amp; VIP Induction</i>	Review 5 Senses Game: Sort bottoms/ rocks - Encourage children to use their senses to sort the rocks - Ask children to difference between the 2 objects.
<b>Week 6</b> <b>Sep 11<sup>th</sup> to 15<sup>th</sup></b> <i>12-14 ~ Pre-Exam Days</i>	People Needs of People - What do people need to survive? Inquiry Activity: - Your needs

<b>Week 7</b> <b>Sep 18<sup>th</sup> to 22<sup>nd</sup></b>	People People Grow and Change - How do people change as they grow? Inquiry Activity: - Young and old
<b>Week 8</b> <b>Sep 25<sup>th</sup> to 29<sup>th</sup></b> <u><b>No Classes</b></u> <i>25-28 ~Teacher's Conference</i> <i>29 – Moon Festival Holiday</i>	People Our Bodies - How do our body help us survive? Inquiry Activity: - Moving body parts
<b>Week 9</b> <b>Oct 2<sup>nd</sup> to 6<sup>th</sup></b> <u><b>3 Days of Class</b></u> <i>5-6 ~Q1 Exams</i>	Review People Art: Make a People Collage

## **2<sup>nd</sup> QUARTER – TENTATIVE COURSE CONTENT**

<i>(NB: Depending on time and interest, the teacher may delete and/or add other selections.)</i>	
<b>Week / Date</b>	<b>Topic / Projects / Assessments</b>
<b>Week 1 (10)</b> <b>Oct 9<sup>th</sup> to 13<sup>th</sup></b> <u><b>3 Days of Class</b></u> <i>9-10 – Double 10 Holiday</i>	Living/ Non-Living - Definition of living things - Identify living things
<b>Week 2 (11)</b> <b>Oct 16<sup>th</sup> to 20<sup>th</sup></b>	- What does living thing need? - Identify some living things around us
<b>Week 3 (12)</b> <b>Oct 23<sup>rd</sup> to 27<sup>th</sup></b>	Insects - Show children insects - Definition of an insect Question: Are Insects living or nonliving things?
<b>Week 4 (13)</b> <b>Oct 30<sup>th</sup> to Nov 3<sup>rd</sup></b> <i>1 - All Saint's Day Mass</i>	Life Cycle of a butterfly - Show children the life cycle of a butterfly
<b>Week 5 (14)</b> <b>Nov 6<sup>th</sup> to 10<sup>th</sup></b>	Review - Living or nonliving - Life cycle of a butterfly
<b>Week 6 (15)</b> <b>Nov 13<sup>th</sup> to 17<sup>th</sup></b>	Plants - Plant is living or nonliving? Needs of Plants - What do plants need to survive?
<b>Week 7 (16)</b> <b>Nov 20<sup>th</sup> to 24<sup>th</sup></b>	Plants Plants Grow and Change - How do plants grow and change?

<b>Week 8 (17)</b> <b>Nov 27<sup>th</sup> to Dec 1<sup>st</sup></b>	Plant Characteristics Parts of the plant (u8 w1) - Look at a plant - Different parts of the plant
<b>Week 9 (18)</b> <b>Dec 4<sup>th</sup> to 8<sup>th</sup></b> 8 - Foundation Day Celebrations	Review Plants Arts: Make your own flower
<b>Week 10 (19)</b> <b>Dec 11<sup>th</sup> to 15<sup>th</sup></b> <b><u>3 Days of Class</u></b> 14-15 ~ Q2 Exams	Exam Week
<b>Dec 18<sup>th</sup> to Jan 1<sup>st</sup></b>	<b>Christmas Holiday</b>

### 3rd QUARTER – TENTATIVE COURSE CONTENT

(NB: Depending on time and interest, the teacher may delete and/or add other selections.)

Week / Date	Topic / Projects / Assessments
<b>Week 1 (20)</b> <b>Jan 3<sup>rd</sup> to 5<sup>th</sup></b> <u><b>3 Days of Class</b></u> <i>4 ~ New Year Mass</i>	Observing Animals Look at the shape of the animals, the color of the animals Animal need What do animals need to survive? -Food, water, shelter,
<b>Week 2 (21)</b> <b>Jan 8<sup>th</sup> to 12<sup>th</sup></b>	What can animals do? -grow, sleep, reproduce
<b>Week 3 (22)</b> <b>Jan 15<sup>th</sup> to 19<sup>th</sup></b>	Types of animals: Birds, reptiles, fish, mammals
<b>Week 4 (23)</b> <b>Jan 22<sup>nd</sup> to 26<sup>th</sup></b>	Animals all around: Look at different places animals live.
<b>Week 5 (24)</b> <b>Jan 29<sup>th</sup> to Feb 2<sup>nd</sup></b>	Ways Objects Move - How can objects move? Inquiry Activity: - Moving objects
<b>Week 6 (25)</b> <b>Feb 5<sup>th</sup> to 9<sup>th</sup></b> <u><b>3 Days of Class</b></u> <i>8-9 ~ CNY</i>	Push and Pull -How can we move objects? Inquiry Activity: - Push and pull objects
<b>Feb 8<sup>th</sup> to 16<sup>th</sup></b>	<b>CNY Holiday</b>
<b>Week 7 (26)</b> <b>Feb 19<sup>th</sup> to 23<sup>rd</sup></b> <i>19 ~ Lenten Mass</i> <i>21-23 ~ Pre-Exam Days</i>	Speed and Direction -How can you change the speed and direction of objects?
<b>Week 8 (27)</b> <b>Feb 26<sup>th</sup> to March 1<sup>st</sup></b> <u><b>4 Days of Class</b></u> <i>28 ~ 228 Memorial Day Holiday</i>	Investigate Water: Experiment: 3 matters of water
<b>Week 9 (28)</b> <b>March 4<sup>th</sup> to 8<sup>th</sup></b> <u><b>4 Days of Class</b></u> <i>8 ~ Q3 Exams</i>	Water: Different kind of water Vocabulary: lake, pond, river

## 4th QUARTER – TENTATIVE COURSE CONTENT

(NB: Depending on time and interest, the teacher may delete and/or add other selections.)

Week / Date	Topic / Projects / Assessments
<b>Week 1 (29)</b> <b>March 11<sup>th</sup> to 15<sup>th</sup></b> <u><b>4 Days of Class</b></u> <i>11 ~ Q3 Exams</i> <i>12 ~ Q4 Begins</i>	Land: Different kinds of land. Vocabulary: valley, mountain, grass land
<b>Week 2 (30)</b> <b>March 18<sup>th</sup> to 22<sup>nd</sup></b> <i>18-21 ~ Fire Drill</i>	Objects in the Sky - What objects are in the sky? - How can you tell if it is day or night? Inquiry Activity: - Day and Night Sky
<b>March 25<sup>th</sup> to Apr 5<sup>th</sup></b>	<b>Easter Holiday</b>
<b>Week 3 (31)</b> <b>Apr 8<sup>th</sup> to 12<sup>th</sup></b> <i>10 ~ Easter Mass</i>	The Sun's Effect on Earth - How does the sun affect Earth? - How can you feel the sun? Inquiry Activity: - The Sun's Light and Heat
<b>Week 4 (33)</b> <b>Apr 15<sup>th</sup> to 19<sup>th</sup></b>	What's the weather? Sunny, cloudy, rainy and snowy Experiment: How do we make rain?
<b>Week 5 (34)</b> <b>Apr 22<sup>th</sup> to 26<sup>th</sup></b> <i>22-26 ~ AP Mock Exams</i>	4 seasons - What are the seasons - What is the weather like in different season?
<b>Week 6 (35)</b> <b>Apr 29<sup>th</sup> to May 3<sup>rd</sup></b> <i>1-2 ~ Pre-Exam</i> <i>1-10~ Final Exams (K, 5, 8, 12 only)</i> <i>4/29 – 5/10 ~ AP Exams</i>	Take Care of Earth -What's good for Earth? What's bad for Earth?
<b>Week 7 (36)</b> <b>May 6<sup>th</sup> to 10<sup>th</sup></b> <i>1-10~ Final Exams (K, 5, 8, 12 only)</i> <i>4/29 – 5/10 ~ AP Exams</i>	Take Care of Earth Vocabulary: recycle, reuse, reduce, compose Game: Recycle items
<b>Week 8 (37)</b> <b>May 13<sup>th</sup> to 17<sup>th</sup></b> <u><b>2 Days of Class</b></u> <i>15-16 ~ Q4 Exams</i> <i>17 ~ Record Day</i>	Exam Week
<b>Week 9 (38)</b> <b>May 20<sup>th</sup> to 24<sup>th</sup></b> <u><b>ACTIVITIES: Double check the school calendar and emails from the administration.</b></u>	Activity Week ----- <i>20-24 ~ Student Clearance Days</i> <i>21 ~ Baccalaureate Mass for Graduating classes</i> <i>22 &amp; 23 ~ Middle &amp; High School Sports Day</i> <i>23 ~ Pre-Kindergarten &amp; Gr. 1 - 4 Recognition/Kindergarten Graduation/Gr. 5 Promotion</i> <i>24 ~ Gr. 6 – 7 Recognition and Gr. 8 Graduation</i> <i>24 ~ Lower School Sports Day</i>
<b>Week 10 (39)</b> <b>May 27<sup>th</sup> to 31<sup>st</sup></b> <u><b>ACTIVITIES: Double check the school calendar and emails from the administration.</b></u>	Activity Week ----- <i>27 ~ House Culminating Activity</i> <i>28 ~ Gr. 9-11 Recognition and Gr. 12 Graduation</i> <i>29 ~ Class Party</i> <i>30 ~ Last Day of School &amp; Report Card Distribution (half day)</i> <i>31 ~ Teachers/Staff Meeting</i>