## **Gifted Education Fund: Off-school Advanced Learning Programmes**

## Programme No. 2023-03 (For primary students)

Title of programme	Nature-based Solutions - Hong Kong Forest Ecology and Carbon Neutrality Programme for Gifted Students
Programme provider	Outdoor Wildlife Learning Hong Kong Limited  Supporting organisations:  The Hong Kong Academy for Gifted Education  The Conservancy Association  Centre for Environmental Policy and Resource Management, The Chinese University of Hong Kong
Theme(s)	<ul> <li>STEAM-related mentorship programme</li> <li>Humanities and social science research programme</li> <li>Self-initiated research study</li> </ul>
Intake	30 students (Primary 4-5 in the 2023/24 school year)
Prerequisite	Nil
Programme delivery period	from May 2024 to Jan 2025 (around 9 months)
Medium of instruction	Course Material: Chinese supplemented with English Class teaching/ discussion: Cantonese supplemented with English
Objectives	<ul> <li>to enhance gifted students' interest in and knowledge of ecology and biodiversity through the study of forest ecology;</li> <li>to strengthen gifted students' understanding of forest conservation as a "nature-based solution" to combat climate change in support of Hong Kong's goal of carbon neutrality;</li> <li>to develop and strengthen gifted students' problem-solving skills and independent learning abilities through engaging them in scientific inquiries which involve data collection and analysis; and</li> <li>to cultivate positive values and attitudes among the gifted students such as care for nature, respect for life and civic responsibility</li> </ul>
Programme outline	This programme enhances gifted students' interest in and knowledge of forest ecology, and equip them with necessary skills to conduct scientific inquiry. They will also develop positive values and attitudes that are essential for personal growth. This programme consists of four phases.  Phase 1: Understanding Hong Kong Forest Environment (2 months)  4 sessions (2 or 3 hours/ session; 10 hours in total)

This phase offers students an overview of Hong Kong forest ecology and ecosystem services. Students will learn about the fundamental concepts and principles related to biodiversity and conservation. Learning and teaching (L&T) activities include lectures, board games and two field trips. Phase 2: Forest ecology and biodiversity (2.5 months) 6 sessions (2 or 3 hours/ session; 17 hours in total) Focusing on biodiversity, this phase allows students to learn about local plants, insects, birds, amphibians and reptiles, which understand the importance role of forests as homes to a wealth of native flora and fauna. Learning and teaching (L&T) activities include lectures, board games, sessions on examining plant specimens, video watching and four field Off-line learning: take-home and self-reflection tasks (2) hours) Phase 3: Forest and carbon neutrality (2.5 months) 5 lessons (3 or 4 hours/ session; 16 hours in total) In this phase, students will learn how forest conservation serves as a "nature-based solution" to combat climate change. This phase covers the ecological value of various vegetation including urban forests, fung shui woods, secondary forests and plantations etc, and understand the conservation and management of trees and soil as important carbon sinks. Off-line learning: take-home and self-reflection tasks (2 hours) Phase 4: Data analysis, carbon storage estimation and group project (2 months) 7 sessions including a closing ceremony (2 or 3 hours/ session; 20 hours in total) Students will work in groups on an enquiry-based research project related to forest ecology and forest carbon storage estimation under the guidance of a mentor. Students will design the scope of their research, collect and analyse data, and prepare research findings in a form of their choice - a presentation poster, a video clip, a presentation, a model, etc. At the end of this phase, students are expected to deliver a presentation at the closing ceremony. Off-line learning: enquiry-based research project and selfreflection tasks (around 15-20 hours) Admission fee Free of charge Application method Application form can be downloaded from the following webpage: https://www.edb.gov.hk/en/curriculum-development/ curriculum-area/gifted/ge fund/gef/osalp.html

	Please complete the application form and send it by post on or before 19 April 2024 to the following address:  Outdoor Wildlife Learning Hong Kong Limited Flat G, 5/F, Reason Group Tower 403 Castle Peak Road Kwai Chung, New Territories (Attn: Mr Roy Cheung)
Document(s) to be submitted	<ul> <li>a completed application form*;</li> <li>evidence of applicant's other learning experience (if any)</li> <li>* Applicants should include the following in the section of student's self-introduction in the application form:         <ul> <li>reasons for application;</li> <li>knowledge about the ecology of Hong Kong; and</li> <li>experiences on learning about nature and wildlife</li> </ul> </li> </ul>
Enquiry	If you have any questions about this programme, please contact:  Mr Roy Cheung (Outdoor Wildlife Learning Hong Kong Limited)  Tel no.: 3619 0626 Email: roycheung@owlhk.org
Announcement of results	by late May 2024