香 港 資 優 教 育 學 苑
The Hong Kong Academy for Gifted Education

Forces and Newton's Law (SCIP1301)

Introduction

Theories of physics are applied to many vehicles and navigation devices.

This course includes a series of activities for exploring physical science in order to improve students' scientific investigation skills, thinking skills and problem-solving skills. Students will acquire basic knowledge of mechanics and fluid mechanics through making "fan propelled cars", "drifting paper planes" and "rubber band helicopters". They will also be introduced to electricity and magnetism through making "compass spheres", "motors" and "electromagnets".

Programme Type / Level

Introductory Course in Science (Token-required) (Core Programme)

Instructor(s)

Mr. Cheung Chak Man , Physics and Integrated Science Teacher of Cognitio College (Hong Kong) (This programme is co-organized with Cognitio College (Hong Kong))

Target Participants

- P4 to P6 HKAGE student members
- Class size: 30

* Priority will be given to student members who are in Mathematics and Sciences domain

Medium of Instruction

Cantonese with Chinese handouts

Certificate

Certificate will be awarded to participants who have:

- Attended **AT LEAST 3** sessions AND
- Completed all the assignments with satisfactory performance

Intended Learning Outcomes

Upon completion of the programme, participants should be able to:

1. Explain logically the mechanics concepts such as Newton's Third Law by assembling and testing a fan propelled car;
2. Investigate aerodynamics, energy and energy conversion through creating drifting paper planes and rubber band helicopters;
3. Design a fan propelled car by applying mechanics concepts

Screening

Please answer the screening question in the online application form.
*The screening question is designed to help the applicant understands the course level and the course content. The question must be answered by the student applicant and it can only be attempted once. The answer cannot be changed once the application is submitted. Selection is based on students' performance in answering the question. Only students who can demonstrate motivation and Physics knowledge in the screening question can be enrolled in the programme.

Application Deadline

11 May, 2015

Application Result Release Date

13 May, 2015

Student members may withdraw from the programme on or before the deadline. Otherwise, the token will be deducted.

Schedule

Session	Date	Time	Venue
1	23 May	9:30 a.m. – 12:30 p.m.	Cognitio College (Hong Kong) Integrated Science Laboratory[1]
2	30 May		
3	6 Jun		
4	27 Jun		

[1] 4 Sui Man Road, Chai Wan, Hong Kong (Map)

Enquiries

For enquiries, please contact us at 3940 0178 or 3940 0102.