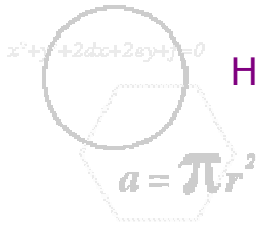




香港資優教育學院 The Hong Kong Academy for Gifted Education



Multi-disciplinary Programme Harmonies In Nature : A Dialogue between Mathematics and Physics

(Date: 6/2/2010 to 24/4/2010)

Co-organiser: The University of Hong Kong



The teaching of mathematics and physics in secondary schools is usually regarded as two separate subjects. However, such a practice deprives students of the opportunity to see how the two subjects are intimately interwoven.

The programme attempts to integrate the two subjects into a meaningful dialogue between mathematics and physics. The underlying theme would be **the role and evolution of mathematics (mainly calculus, with related topics in linear algebra and geometry) in understanding the physical world**, from the era of Issac Newton's mechanics to that of James Clerk Maxwell's electromagnetism and possibly beyond, to that of Albert Einstein's relativity. In other words it tries to tell the story of the triumph mathematics and physics won over together in the past four centuries.

The study of physics has brought about so many Mathematical concepts and applications that are applicable in Physics. These concepts, methods and applications will be developed through discussion, assignments and tutorials. Proactive and cooperative learning, rather than passive or competitive participation, is expected of the class.



Programme Details

Date	6 Feb – 24 Apr 2010, 10 sessions on Saturdays listed below ❖ 6/2, 20/2, 27/2, 6/3, 13/3, 20/3, 27/3, 10/4, 17/4, 24/4 ❖ <i>In case of cancellation of a session due to the hoisting of black rainstorm warning or No. 8 typhoon signal, the cancelled session will be rescheduled to Saturday, 8 May 2010.</i>
Time	9:30 am-12:30 pm
Venue	T3, Meng Wah Complex, The University of Hong Kong Map: http://www.hku.hk/estates/newmap/
Quota	50 student members. If oversubscribe, applicants would be admitted to the

course on a first come, first served basis.

Language	Mostly Cantonese supplemented with English glossary
Target participants	<p>Priority will be given to those student members with the below 2 qualifications. Applications from other interested student members with confidence in completing the course will be put on the waiting list.</p> <ol style="list-style-type: none">1. S.6 or above student members in Mathematics or Sciences Programmes of the Hong Kong Academy for Gifted Education (HKAGE) or the “Support Measures for the Exceptionally Gifted Students Scheme”2. Attained Grade B or above in A. Math AND Physics in HKCEE
Course requirement and merit	<p><u>Certificate of Attainment</u> will be awarded to participants who are able to fulfill all the course requirements which include:</p> <ul style="list-style-type: none">❖ achieving an attendance rate of not less than 80% AND❖ complete all the assignments with satisfactory performance
Course fee	Free of charge
Application procedure & deadline	<ul style="list-style-type: none">❖ Students should download the Application Form from the following website: http://www.hkage.org.hk/en/what_news.html (Multi-disciplinary)❖ Students should submit the completed Application Form <u>with a Copy of the HKCEE Result</u> to <i>The Hong Kong Academy for Gifted Education</i> by mail or by fax (<i>Fax number: 2490 4730</i>) on or before <u>15 January 2010 (Fri)</u>. Late application will not be considered.❖ The list of successful applicants will be posted on the website above <u>after 5pm on 22 January 2010 (Fri)</u>. No further notification will be made.❖ Successful applicants should download a “Confirmation Slip” from the above website. Completed Confirmation Slip should be faxed to the Academy <u>on or before 29 January 2010 (Fri)</u>.
Address of the HKAGE:	<p><i>The Hong Kong Academy for Gifted Education</i> East Block, Kowloon Tong Education Services Centre, 19 Suffolk Road, Kowloon Tong, Hong Kong</p>
Enquiry	For enquires, please contact Mr Kwong at 3698 3494.