


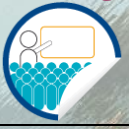



Fun With Logic

(MATP1811)

<p>Introduction</p>	<p>Mathematics is about deduction and reasoning. This course is an introduction to logical thinking. Students will learn logic through games, puzzles and other class activities. The basic languages and rules in logic will be introduced. Simple deduction and reasoning techniques will be taught.</p>	
<p>Programme Type / Level</p>	<p>Across Domains and Interdisciplinary Course (Level 1) (Token-required)</p>	
<p>Instructor(s)</p>	<p>Dr. LAU Chi Hin (Lecturer, Department of Mathematics, CUHK)</p> <p>Dr. Lau obtained his BSc degree from CUHK and PhD degree from HKU. He has almost twenty years of experience in secondary and tertiary education. During his teaching career, he was involved in many different programmes in gifted education organised by CUHK, HKAGE, Education Bureau, etc.</p>	
<p>Pre-requisite</p>	<p>No special prerequisites are needed.</p>	
<p>Target Participants</p>		<ul style="list-style-type: none"> ➤ P4 to P6 HKAGE student members ➤ Class size: 30
<p>Medium of Instruction</p>		<p>Cantonese with English handouts</p>
<p>Certificate</p>		<p>E-Certificate will be awarded to participants who have:</p> <ul style="list-style-type: none"> ❖ Attended AT LEAST 3 sessions AND ❖ Completed all the assignments with satisfactory performance
<p>Intended Learning Outcomes</p>		<p>Upon completion of the programme, participants should be able to:</p> <ul style="list-style-type: none"> ● Understand the basic definitions of logic. ● Solve simple puzzles and problems with logic. ● Apply rules of logic to solve logical problems. ● Perform simple logic deduction and raise arguments.
<p>Screening</p>		<p>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 the knowledge of logic in the screening question can be enrolled in the programme.</p>
<p>Application Deadline</p>	<p>29 Apr, 2019 12:00 n.n</p>	<p>Application Result Release Date 10 May, 2019</p>
<p>If student members withdraw from the programme after the Application Deadline, the token will be deducted.</p>		

Schedule



Session	Date	Time	Venue (HKAGE)
1	22 Jul	2:00p.m.-5:00p.m.	Room 303
2	23 Jul		
3	25 Jul		
4	26 Jul		

Sample Example for the Programme

4. Let P, Q, R be three statements. Show that the statements ' P and $(Q$ or $R)$ ' and ' $(P$ and $Q)$ or $(P$ and $R)$ ' are equivalent by completing the following truth table.

P	Q	R	Q or R	P and $(Q$ or $R)$	P and Q	P and R	$(P$ and $Q)$ or $(P$ and $R)$
T	T	T	T	T	T	T	T
T	T	F	T	T	T	F	T
T	F	T	T	T	F		
T	F	F	F				
F	T	T	T	F	F		
F	T	F	T	F	F	F	F
F	F	T					
F	F	F	F	F	F		

5. Write down a statement which is equivalent to ' P or $(Q$ and $R)$ '.
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Enquiries

For enquiries, please contact us at 3940 0101 after language selection, press "1".