

V-Campus Singapore Holiday Camps

With academic programming from
Stanford University's

Education Program for Gifted Youth

Session 1: 8 June 2009 – 19 June 2009

Session 2: 22 June 2009 – 3 July 2009

Venue: Hwa Chong Institution

About the V-Campus Holiday Camps

Every summer, Stanford University plays host to high school students from around the world at its Education Program for Gifted Youth (EPGY) Summer Institutes in the United States. The Summer Institutes are academic camps that allow students to expand their abilities and explore their interests in a learning environment highly conducive to intellectual development. The Summer Institutes are specially tailored for the needs of highly motivated students who want to enrich and accelerate their academic pursuits.

V-Campus, in collaboration with EPGY Stanford University, held the first Holiday Camp in Singapore in June 2004. Modeled after the Summer Institutes, the camps use academic curriculum developed at EPGY Stanford University and all courses are taught by EPGY instructors. The first Singapore Holiday Camp was met with an enthusiastic response, and since then, more than 1,000 participants have attended the camp. Subsequently, Holiday Camps were also held in Thailand and Indonesia.

The 2009 Holiday Camp in Singapore

Instructors from EPGY Stanford University will fly into Singapore to conduct the camps. These instructors are selected for their expertise in the subject areas as well as their ability and experience in teaching talented students. The instructors will be assisted by selected local teaching assistants. The combination of expert instructors and the opportunity to study with peers from diverse backgrounds and cultures all serve to make the experience unforgettable. Students leave the camp with fond memories, both intellectual and social, often wishing that the camp would last longer.

On successful completion of the academic holiday camp, participants will receive a certificate from EPGY Stanford University together with a written evaluation of their performance.

Session 1 will be from 8 - 19 June, while Session 2 will be from 22 June – 3 July. The subjects being offered include Creative Writing, Expository Writing, Mathematical Logic and Problem Solving and Quantum Mechanics. Students will choose a single subject and will be provided with the opportunity to explore the chosen course in detail and study challenging materials which go beyond what is normally taught in schools. Classes will be held daily from 9:00 a.m. to 3:00 p.m., except on weekends.

The course fee is S\$1,500, and this includes all course materials and lunch.



Elementary-level Course Descriptions

Introduction to Mathematical Logic and Problem Solving (Ages 10-12)

This course will cover topics in geometry, combinatorics, graph theory, game theory, and number theory. There will be an emphasis on developing problem solving skills through fun, interesting, and challenging problems. The course will include classroom instruction and daily problems and projects; the assignments will comprise of problems at varying levels of difficulty so that even the best students will be challenged, yet every student will complete them with a sense of accomplishment. Topics are chosen according to their accessibility for students at this level, with an eye toward those that are fun and interesting to mathematically talented and motivated students.

Elementary English Creative Writing (ages 10-12)

The Elementary Creative Writing course is designed for students with writing talent, and who enjoy writing short stories, poetry, and plays. Students will read and discuss works by classical and contemporary authors, while also writing pieces of their own. The course will be taught in a workshop style where much time will be spent in small groups, with peer critique and discussion. This course will give exceptional students who are serious about creative writing the chance to develop their talent in an ideal workshop environment.

Upper-level Course Descriptions

English Expository Writing (Ages 13-15)

This course is ideal for verbally talented students who are passionate in writing about ideas and social issues. The Expository Writing course introduces students to a variety of essay structures and modes of essay development. The course examines two different forms of writing side by side: creative non-fiction and analytical essays. In doing so, students compare the use of personal and fictional material with analysis and criticism. In the course, students investigate examples of reflective personal essays, expository essays, and research-based arguments written by well-known authors. The course hones critical thinking skills and increases sensitivity to issues of crafting, while helping students to develop a personal voice and clear, lively style, as well as the use of focused, compelling thesis statements and coherent, well-developed paragraphs. In doing so, students learn effective and elegant techniques for using both creativity and research in their own academic writing. Assignments may include short analytical essays, a longer personal essay, or a research-based essay.

English Creative Writing (Ages 13-15)

In this course, students develop the imaginative, critical and technical skills necessary for writing fiction and poetry. Using the published work of well-known authors and original student writing, students explore various topics and problems that confront anyone embarking on the creative-writing process. Students read texts as writers, not as critics or historians of literature; each text is reviewed as a template for imitation and inspiration. The course follows the workshop model where students bring their own stories and poems to class for group discussion, and develop the skills to sympathetically critique each others' work. Through this process, students learn a variety of techniques for improving and developing their own writing. By the end of the course, students will be comfortable and confident in identifying basic and complex literary devices such as assonance, consonance, alliteration, aspects of plot and narrative, literary allusion, etc. Handouts, in-class exercises, peer review, and individual conferences help students define and set goals for strengthening their writing.

Mathematical Logic and Problem Solving (Ages 13-15)

This course is for those who delight in solving challenging math problems and who would like to further develop their problem-solving and logical-reasoning skills. Problem solving is the activity of the mathematician, and logical reasoning is the framework for this activity. This course will use examples outside of mathematics but focusing on the use of logic within mathematics. Students are introduced to the basics of propositional and first-order logic which gives them access to formal notions of familiar logical methods. Good problem-solving skills also include ingenuity, creativity, and the ability to apply a variety of strategies and techniques. In this course, students are taught fundamental tools and standard techniques for problem solving, and they are given the opportunity to develop their mathematical ingenuity through practice on problems in a wide range of difficulty. The mathematical subject areas that the problems are drawn from include set theory, number theory, and combinatorics - none of which require more background than algebra.

Physics: Quantum Mechanics (Ages 16-18)

Date: 1 June 2009 – 12 June 2009

This course is intended for students who have had exposure to physics but yearn to discover more about the modern aspects of physics. The impact of Quantum Mechanics is felt every day; it is estimated that 30 percent of the U.S. gross national product stems from inventions based on quantum physics. It is becoming clear that quantum physics is no longer an esoteric topic to be learned in graduate school, but a necessity for many areas of research like chemistry, communication technologies, engineering, and even biological studies. Many of the mysterious aspects of quantum mechanics have been recently explored experimentally, confirming that the quantum world is vastly different from our everyday experience. In this course, students explore the origins and development of the theory, followed by a thorough study of its bizarre implications in light of recent experiments. The impact and applications of quantum mechanics will also be explored as a way of relating this theory to the real world around us.



For further information and for applications, please contact:

Lim Ming Yang at 79 Robinson Road, #25-02, CPF Building, Singapore 068897

Tel: 6557 0356 Fax: 6557 0320 e-mail: mingyang.lim@vcampus.sg

Website: www.vcampus.sg

Participants' Testimonial



"I have gained much valuable and evaluative feedback on the standard of my writing, and also learnt more about the formal techniques of expository writing."
~ Wong Jun Sean, Raffles Institution



"The camp has given me a new perspective on how to write factual essays. The teacher's explanations were clear and comprehensible, and it is more interesting than what can be taught in school!"
~ Jennifer Driscoll, Raffles Girls' Primary School



"This course helped me to stretch my imagination. I have learnt how to improve my writing skills and create poems. It was very fun!"
~ Vanessa Chan, Taonan Primary School



"The course was filled with a variety of new topics that were challenging and at the same time very interesting. The camp was a very enriching experience because of what I learned and the people I met." ~ Samantha Koh, Singapore American School

Parents' Testimonials

"The Holiday Camps offer students the opportunity to learn highly challenging material at a rate suited to their advanced abilities. My son, Way Tan, was fortunate to have experienced a double portion of this unique opportunity within the same year. The variety of programs offered provided an unparalleled opportunity for young scholars to experience college classroom instruction second to none. Classes have approximately 15 to 20 students and are taught by highly qualified and nurturing instructors and teaching assistant teams. Outside the classroom, students and instructors get to interact even more during meals and free time. Participation in the Holiday Camp has fostered intellectual, social, and emotional growth for Way. As the students' genuine academic motivation is at the heart of the program, the truly motivated individual will enjoy a stimulating environment with a community of peers unlike any she or he has ever experienced."



~ Mrs Janey Tan, parent of Way Tan

"My wife and I are pleased that V-Campus's program has helped Jonathan to be exposed to a level of higher learning in Maths. Under the excellent tutorship of the EPGY Stanford University lecturers that encouraged his class participation and interaction with his classmates, it has helped in raising his social confidence. Commendable testimonials from the lecturers and awards of Best Student for both Primary and Secondary level program had helped him to realise his potential and has spurred him onto greater desire of academic learning in Maths."

~ Mr Joshua Ang, parent of Jonathan Ang