

For Winter 2021 | OASA x IVE KT

Mission StarGate

Winter BaseCamp



Key Information for Course Design

When

4, 11, 18th Dec 2021 (3 Saturdays)

Winter term at the IVE Kwun Tong School.



Applicants:

Candidates for Winter 2021

Admission:

Form : A mix of S4-6 students . 64 students in the program

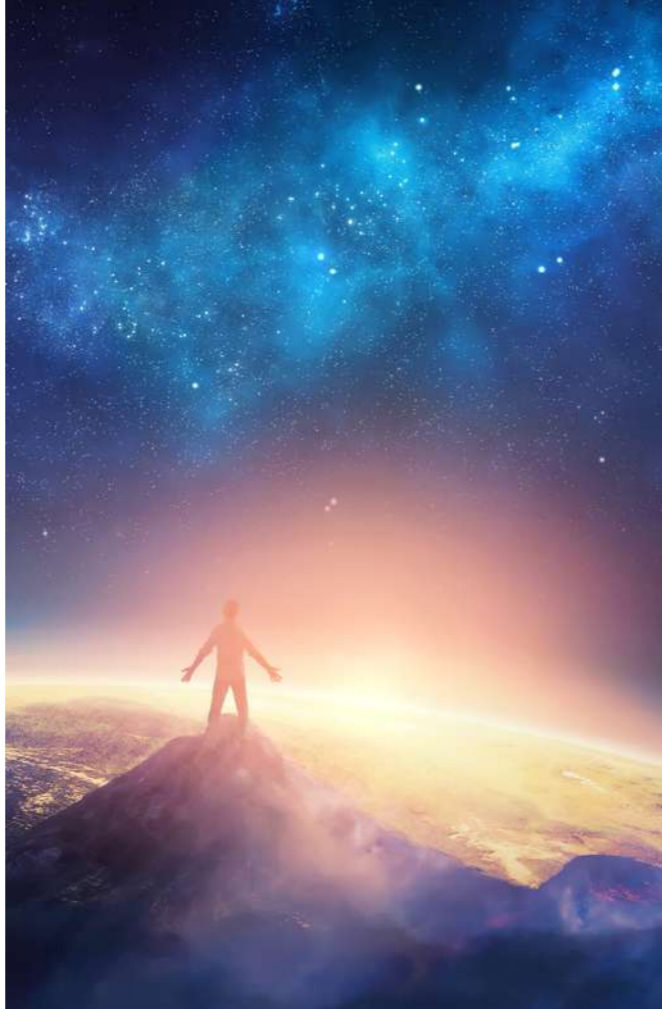
Theme: Entrepreneurship and Design, riding on the NewSpace Economy of 2022.

Learning Objectives : The key objective of Mission Stargate is for the students to arouse their curiosity and interests towards Business and Design subjects, using the context of Space and Space Narratives as a platform.

Output: A portfolio of sufficient quality that can demonstrate learnings for their further academic and professional pursuit in HK, Greater Bay, and even globally. This also means students will be given ample opportunity to interact with global team mentors of OASA.

Teaching Medium: Cantonese mixed with English, that is, bilingual. All written and presentation materials in English.





Unique Learning Experience

This is an exciting learning journey!

A team of 4-5 from each school. Acting as explorers and pioneers, they are given fun problems to solve. Through the 3 half-days' journey, they have to turn their learning into a final presentation to an audience of experts.

The outstanding teams will be known publicly as HK's 1st Astro Winning School Team and team members will have opportunities to become space cadets in OASA.

Learners from this course will go through **Four Phases**. At the end, they are required to deliver an English presentation to demonstrate their team learning. Each phase of learning incorporates the essentials of **Entrepreneurship, Innovation, and Design**.



Program Outline

Upon active participation, students should come to,

1. Understand the basic and fundamental of Design and Business and the NewSpace economy;
2. Get a taste of the power of problem solving, creative thinking, and presentation;
3. Communicate to others on what they have found from their analyses.

Flow and Sequence:

Day 1 - Workshops for basic intro of Space, Design and Business context

Day 2 - Project-base learning and mentoring session

Day3 - Pitching Presentation, award ceremony

Cost : Early Bird - \$900/ student (On or before 17 Nov 2021)
\$1200/ student



The Plan

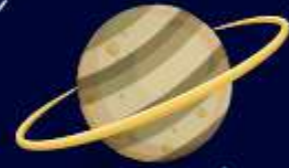
- 64 Explorers
- 16 Teams
- 8 Learning activities
- 4 Workshops
- 1 Journey

Search
Day1 Morning
Earth & Moon



Explore
Day 1 Night
Space

Day2 Morning
Jupiter & Saturn *Build*



Day2 Afternoon
Uranus & Neptune *Deploy*



Day 1 Afternoon
Venus & Mars *Know*



StarGate
Presentation



	Day 1 (4/12) 9am - 1 pm		Day 2 (11/12) 9am - 1 pm	
	Workshop 1	Workshop 2	Workshop 3	Workshop 4
Theme	Earth & Moon	Venus & Mars	Jupiter & Saturn	Uranus & Neptune
About	Search	Design	Build	Deploy
Design	Business & Space	Design & Space	Conceptualisation	Validation
Entrepreneurship	Definition	Problem Framing	Proposing	Pitching
Topics (Entrepreneurship & Design)	<u>Workshop 1 (2 hrs) :</u> Prof. Gregg <ul style="list-style-type: none"> - Why do we want to build our own business - What's entrepreneurship and astropreneurship - The NewSpace Economy - The spirits of exploration and entrepreneurship - Seeing a bigger world of opportunities - How to ask great questions 	<u>Workshop 2 (2 hrs):</u> Michael Ng (TBC) <ul style="list-style-type: none"> - Design 101 - Design Thinking - Design opportunities of space economy imagination ... etc. - Solving problems by discovering problems through research - CubeSat and Data introduction 	<u>Workshop 3 (2 hrs):</u> Thomas Wong <ul style="list-style-type: none"> - Prototyping and hands-on workshop - Build their own CubeSat model for solving a problem - Stanford's Rapid Prototyping Exercise - Data Visualisation 	<u>Workshop 4 (2 hrs):</u> Perry Lam <ul style="list-style-type: none"> - Mission log writing (Executive summary) - Vision and Mission statement ... etc. - Presentation techniques - Story telling techniques - Practice on telling good story
4Ps of Learning	Prepare	Propose	Practice	Perform
Goals	Initial encounter of new knowledge	Arousal of interests	Integration of new knowledge	Application of knowledge and skill to real world

Rundown

	Day 3 (18/12) 9am - 1 pm	
Topics	Learning from the Industry Experts	Show and Tell Exhibition
Time	9:00am - 11:00am	11:00am - 1:00pm
Workshop	Mentoring roundtable pitching	StarGate Exhibition and award ceremony
Duration	10 mins. per round, 8 turns	1 booth for each team to display their findings
Buffer Time		
2 hr Duration	<p><u>Mentoring roundtable (2 hrs) :</u></p> <p>All the mentors</p> <ul style="list-style-type: none"> - Team has to present to each mentor - 10 mins. for each round and swap to other mentors at different tables - Mentors also ask questions to the team and give feedbacks 	<p><u>Show and tell exhibition :</u></p> <p>All the mentors</p> <ul style="list-style-type: none"> - Students have to setup a presentation booth with computer aid - Exhibits to present what problem they are solving and their design of the solutions - Students may use story map or ppt slides to present their ideas - The core judging criterion is based on the quality of the questions they asked
		Photo taking
		Closing
Goals of learning	Application of knowledge and skill to real world	

The 4Ps - OASA's Learning Engine

The program is designed around the 4Ps of a learning engine. The spirits of the 4Ps is for optimal learning to occur, as the learner travels from one part to the other. Each of the workshops would be adapting the 4Ps framework.

Preparation

The Goal of this phase is to arouse learners' interest, give them positive feelings about the forthcoming learning experiences, and put them into an optimal state for learning.

Presentation (Proposing)

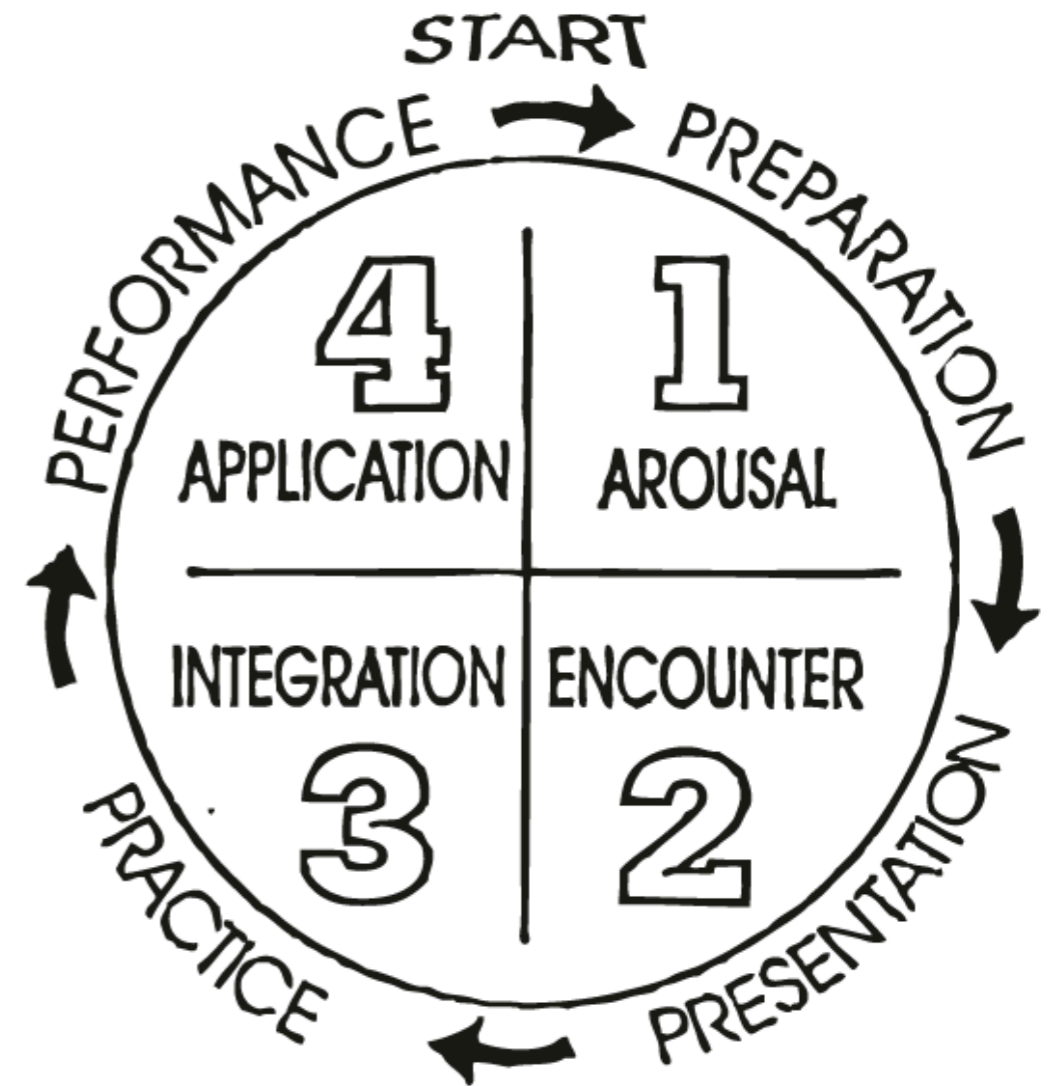
The Goal of this phase is to help learners encounter the new learning materials in ways that are interesting, enjoyable, relevant, multi sensory, that appeal to all learning styles.

Practice

The goal of this phase is to help learners integrate and incorporate the new knowledge or skill in a variety of ways. Making mistakes is a part of the learning.

Performance

The goal of this phase is to help learners apply their learning to their daily lives. Applying the learning helps to extend the learning to other areas and improve overall performance.



OASA Global Mentor Roundtables

A total of 8 global industry and business experts are invited to be mentors. All mentors take turn in a roundtable format to mentor and help ground their ideas.

That session would be on Day 3.

The roles of the Global Team Mentors are to give feedbacks and to help the team ground their ideas. The best ideas are those that have the highest chance of becoming real and operational. The final deliverables are presented to the mentors so they understand what the teams can do to achieve their best results.



Half-Day Presentation - Show & Tell

Each team is required to present their findings and ideas in an exhibit setting with computer aid.

Students are required to show their prototypes and tell what's the plan of the business in brief. The project presentation has to incorporate what they have learnt in the process.

Judges are invited to give feedbacks. Three teams will be selected as the best explorers award winners (Best questions to ask).

