



Secondary 2
SUBJECT
COMBINATION
BRIEFING

Thur, 9 Feb 2023

Overview

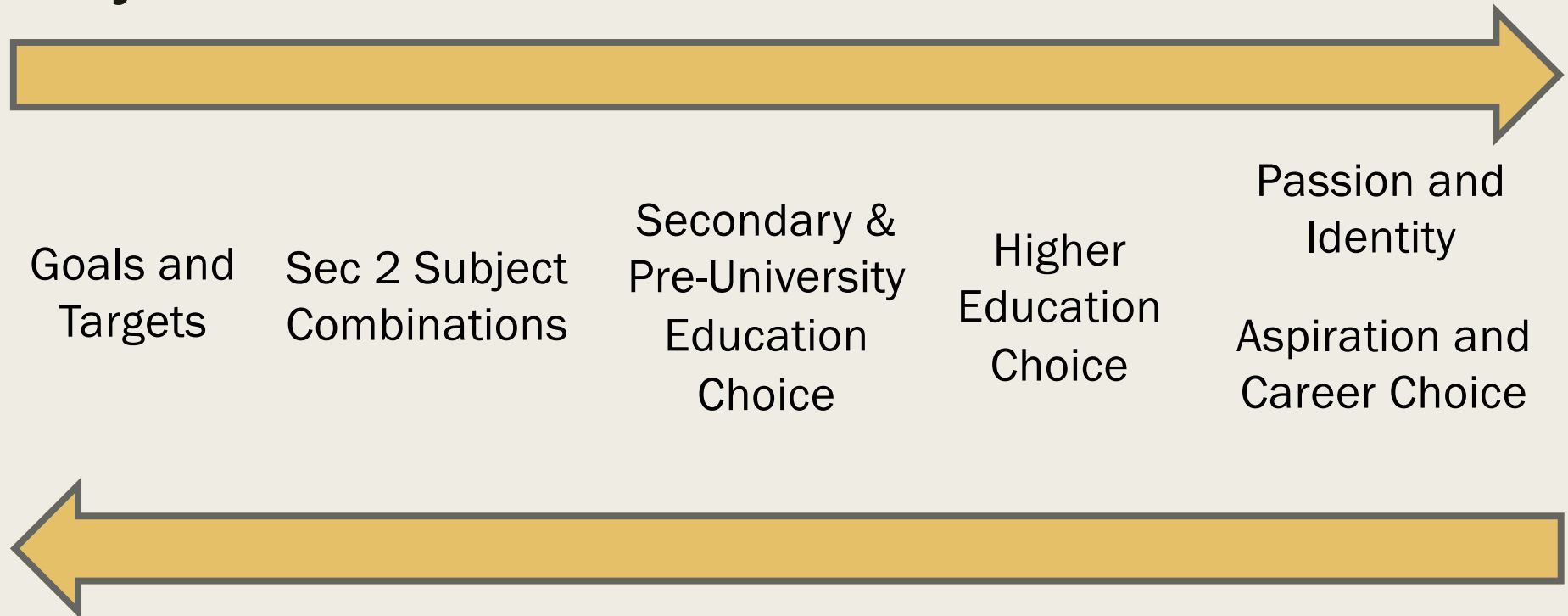
- 1. Principal's Address**
- 2. Year Head Briefing**
 - a) CCE: Co-curriculum Matters***
 - b) Progressing to Sec 3***
 - c) Upper Sec Subject Combinations***
- 3. Brief Upper Sec Subjects Introduction**
- 4. Interaction with Home Tutors**
 - Post-secondary pathways***



Principal's Address

EDUCATION AND CAREER GUIDANCE

Why ECG?



What is focused in School ECG efforts?

(Part of Character and Citizenship Education)

3 Big Ideas	4 Themes	3 ECG Questions
<ul style="list-style-type: none">• Identity• Choices• Relationships	<ul style="list-style-type: none">• Self-Awareness and Self-Management• Awareness of Relational Support and Decision Influencers• Exploring the Education Landscape and Planning Pathways• Career Sectors Exploration	<ul style="list-style-type: none">• Who am I?• Where am I going?• How do I get there?

What can be discussed at Home?

3 Big Ideas	4 Themes	3 ECG Questions
<ul style="list-style-type: none">• Identity• Choices• Relationships	<ul style="list-style-type: none">• Self-Awareness and Self-Management• Awareness of Relational Support and Decision Influencers• Exploring the Education Landscape and Planning Pathways• Career Sectors Exploration	<ul style="list-style-type: none">• Who am I?• Where am I going?• How do I get there?

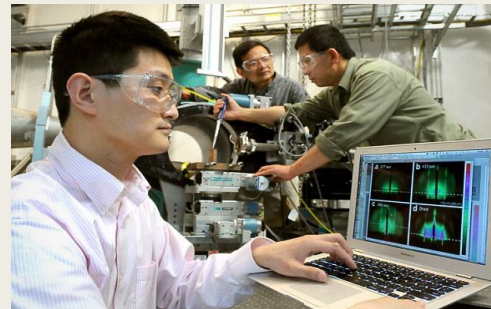
Careers that we are familiar with...

- Teachers
- Doctors
- Nurses
- Lawyers
- Bankers
- Journalists
- Architects
- Engineers
- Scriptwriters
- Psychologists



New Career Opportunities

- Early Childhood Educators
- Healthcare Aides, Home Care Assistant
- Gerontologist
- Nanotechnologist
- Green Economy / Environmental Engineer
- Unmanned Vehicles System Engineer
- Digital, Cryptocurrency and Blockchain Architects
- Information & Cyber Security
- Immersive Game development
- Med-Tech entrepreneurs
- AI engineering
- Data Scientist
- Space Tech
- Internet of Things
- People & Culture



Future-Readiness: No longer Arts vs Science; No longer just Academic

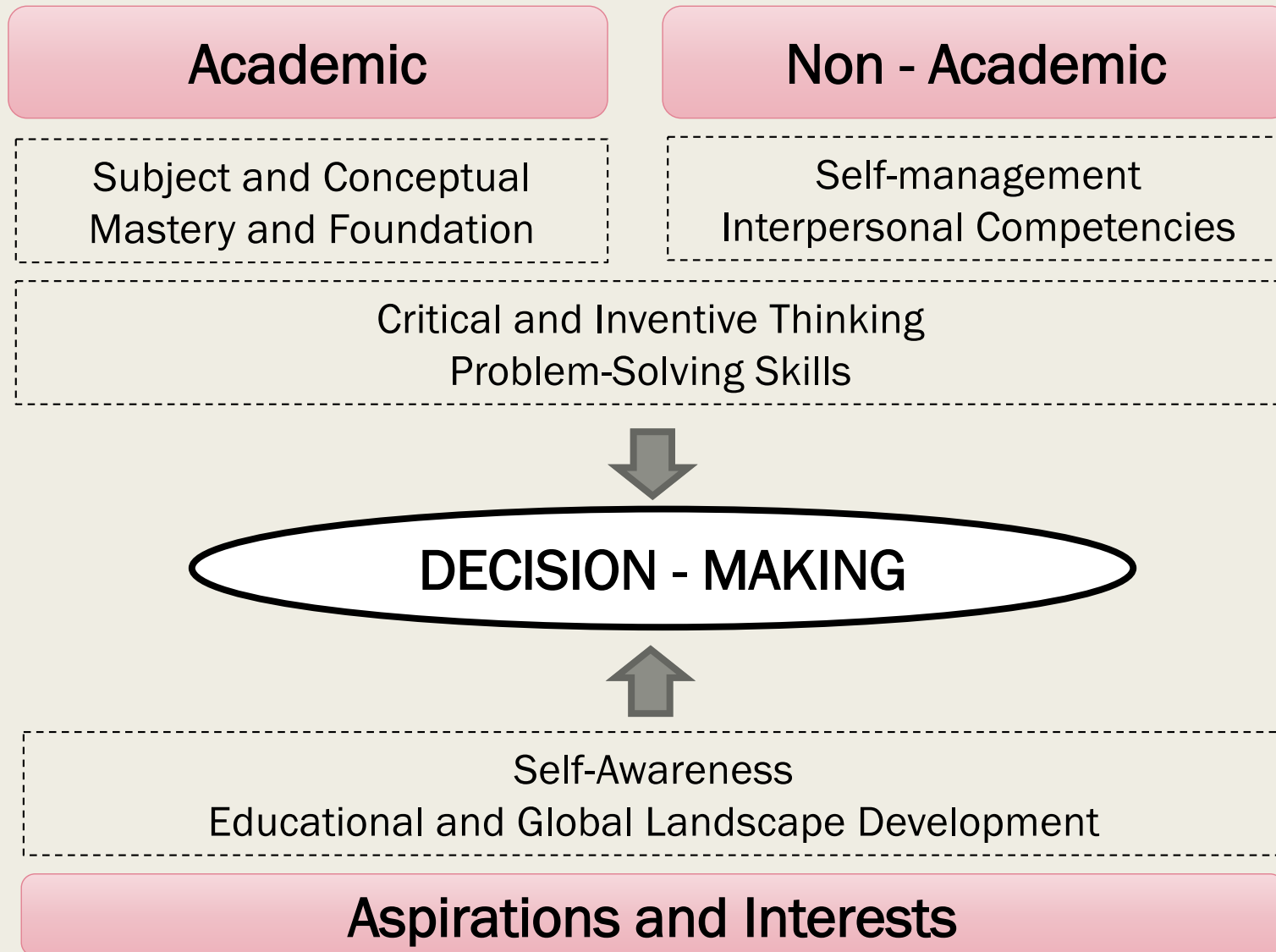
“Incoming freshmen to the NUS Faculty of Engineering and the NUS School of Design and Environment will read a new Common Curriculum that integrates knowledge and skills from both schools, starting from August 2021... taking students out of their silos to embrace the intersection of different disciplines”

~NUS Provost



Sec 2 Subject Combination

Important Decision of Secondary School Journey





Year Head Briefing

CCE &
CO-CURRICULUM
MATTERS



The CRESTIAN OVERCOMER



ACTIVE & ENGAGED LEARNER

Self- motivated to seek knowledge beyond the classroom

Attentive and take ownership in their learning



INNOVATIVE PROBLEM SOLVER

Able to analyze problems, conceptualize theses, develop arguments, weigh evidence, and derive conclusions



EFFECTIVE COMMUNICATOR

Able to articulate complex information and ideas effectively in varying context / audience / modes

Able to communicate with others for collaborative purposes



SELF DISCIPLINED & RESPONSIBLE LEADER

Able to acquire self-awareness and apply self-management skills to achieve personal well-being and effectiveness

Able to do what is right without being told

Able to acquire social awareness and apply interpersonal skills to build and maintain positive relationships based on mutual respect

Able to demonstrate collaborative skills and seek opportunities to achieve common goals and/or improvement



ACTIVE AND CONCERNED CITIZEN WITH GLOBAL AWARENESS

Able to reflect on and respond to community, national and global issues, as an informed and responsible citizen

Able to appreciate the importance of harmony and collaboration between diverse groups in Singapore, and collectively to Singapore's social cohesion

21st Century Competencies

CCE Programmes for Sec 2

1. Crest Time (**CCE Curriculum Content Areas**)
 - *National Education (NE)*
 - *Sexuality Education (Sex Ed)*
 - *Mental Health (MH)*
 - *Education & Career Guidance (ECG)*
 - *Cyber Wellness (CW)*
 - *Family Education (FE)*
2. NYAA Bronze Programme
 - *Level Camp*

National Youth Achievement Award (Bronze)

1. School's signature programme
2. Level-wide attains Bronze Award (Sec 2 students)
3. Objectives
 - *Use as a platform for Values Education, Social Emotional Learning (SEL) competencies and 21st century competencies (21CC)*
 - *To inculcate team spirit*
 - *To provide our students with a platform to make a difference to themselves and their communities.*





National Youth Achievement Award (Bronze)

NYAA 3 Criteria	School Programme	Period
Healthy Living (Physical & Mental Wellness)	PE programmes	Semester 1 and 2
Outdoor Appreciation (To be at Ease with Nature)	Sec 2 level camp	22 to 24 March 2023
Service Learning (Touching Lives, Making A Difference)	VIA (school community)	Semester 2

NYAA Award Ceremony – July 2024

Sec 2 Level Camp Objectives

Desired learning outcomes

- Active & Engaged Learner
- Innovative Problem Solver

Social emotional competencies

- Social awareness
- Relationship management
- Responsible decision making

Leadership competencies

- 5 practices of exemplary leadership

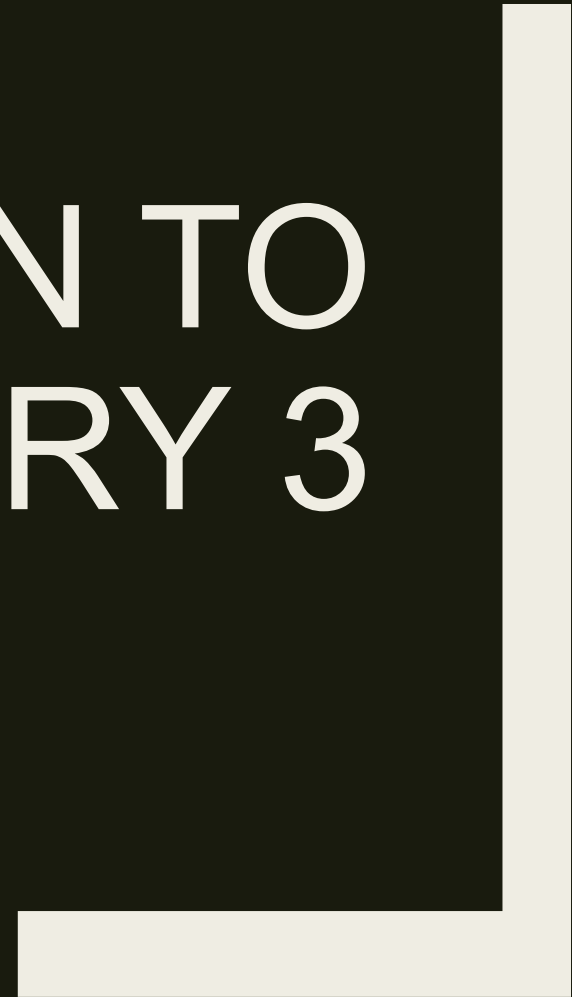
Sec 2 Level Camp

Date: 22 – 24 March

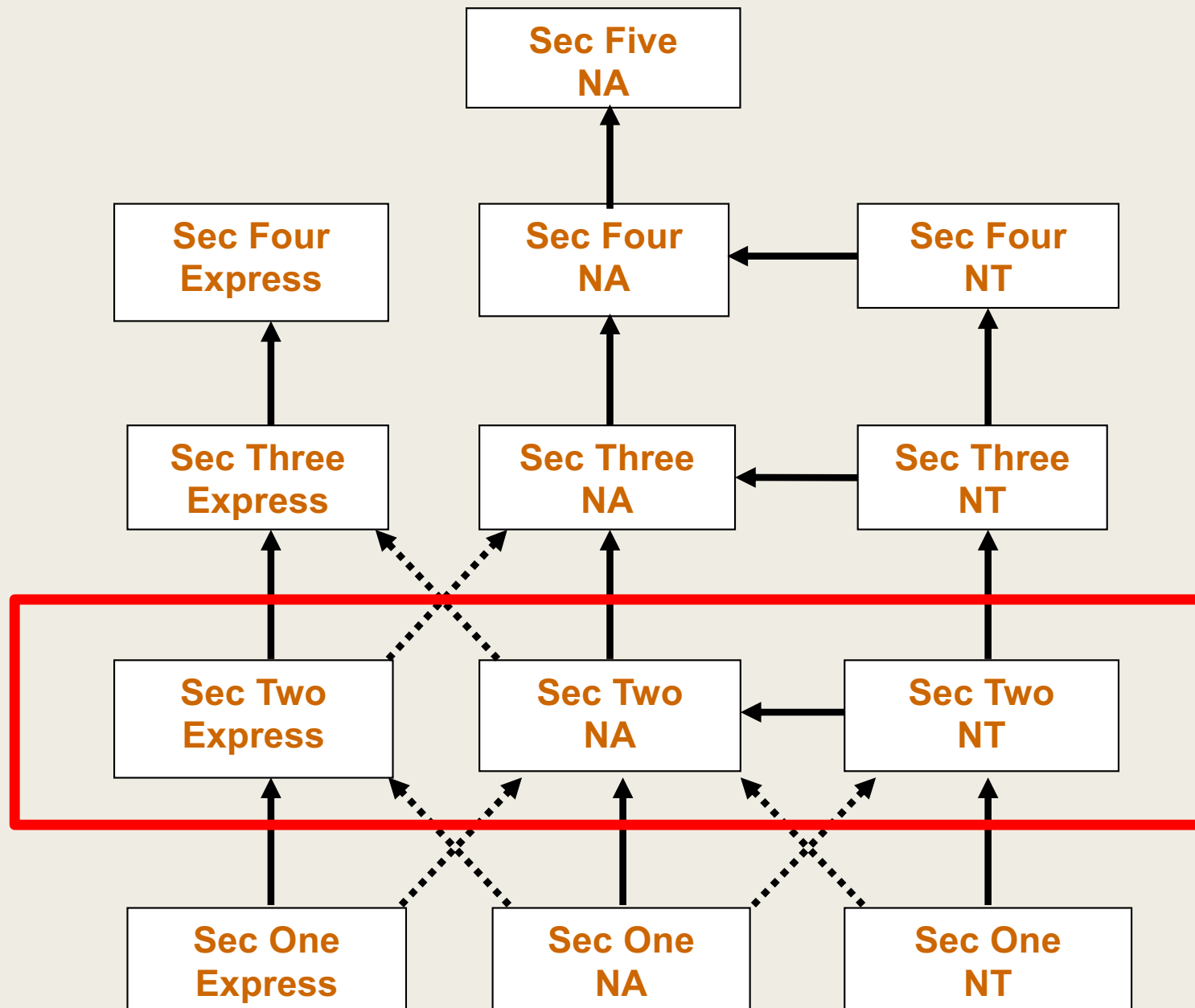
Time: 7.30am to 1.50pm (22/3, 23/3)
7.30am to 12.30pm (24/3)

Venue: in school and out of school

PROGRESSION TO SECONDARY 3



PROGRESSION FOR STUDENTS



Sec 2 - EXAMINABLE SUBJECTS (NT)

7 subjects counted into overall results.

English	Mathematics	Computer Applications	Design & Technology (Sem 1)
Mother Tongue	Science	-	Food & Consumer Education (Sem 2)

Various modes of assessment: Class tests, Projects, Presentations

Assessment Weighting: Refer to Annex A of letter to parents (17 Jan) for details.

Note: Art is not an examinable subject at Lower Secondary Level for (NT).

Sec 2 - EXAMINABLE SUBJECTS (NA/EXP)

10 subjects counted into overall results.

English	Maths	Geography	Design & Technology (Sem 1 or 2)	Art
Mother Tongue	Science	History	Food & Consumer Education (Sem 1 or 2)	
		Literature		

Various modes of assessment: Class tests, Projects, Presentations

Assessment Weighting: Refer to Annex A of letter to parents (17 Jan) for details.

Sec 2 - EXAMINABLE SUBJECTS (NT/NA/EXP)

Subjects assessed either in Semester 1 or Semester 2:

Semester 1	Semester 2
<ul style="list-style-type: none">• Design & Technology	<ul style="list-style-type: none">• Food & Consumer Education

**UPPER SECONDARY
SUBJECT
COMBINATIONS**



SUBJECT COMBINATION (CONSIDERATIONS)

- 1. Entry requirements for post-secondary education**
- 2. Students:** Strengths, Interests and Well-being
- 3. Number of subjects for national exams:**
 1. N(T): Max 7
 2. N(A): Max 8
 3. Express: Max 9
- 4. Availability of school's resources:** teachers, time-tabling, etc.

SUBJECT COMBINATION (ALLOCATIONS)

Priority given based on:

- 1. Merit – overall results of all 7 or 10 subjects for the whole year**
- 2. Choice**
- 3. Places available**

SUBJECT COMBINATION (TIMELINE)

SN	ACTIVITY	TIME-FRAME
1	Briefing for parents	9 Feb
2	Briefing for students	By Mar
3	Interest survey for students	By Jul
4	Briefing for students regarding individual subjects (After EOY in Oct)	Oct (End EOY)
5	Final subject combination selection	Oct (After EOY)
6	Release of results	Nov

Subject information

- IP HODs will provide a brief introduction to the aim and expectation of the mainly new subjects that are taken at Upper Secondary



Aesthetics, Craft & Technology (ACT)

Mr Tan Wee Meng (HOD ACT)

GCE Coursework Subjects Assessment Components

Subjects	Coursework Component	Written or Paper Component
Art	60% (Prep studies and Main Art work)	40% (Prep Studies & 3 hr Art Paper)
Design & Technology	60% (E,NA)/ 70% (NT) Design Journal, Boards, Prototype	40% (E,NA)/30% (NT) (Written Paper)
Nutrition and Food Science	60% (Report and Practical)	40% (Written Paper)
*Music	60% (Performing and Music Creating)	40% (Listening & Written Paper)

*O-level Music Audition & Selection Test: Play 2 CONTRASTING Pieces on any instrument & Listening and Theory Paper
 *O-level Indicative: ABRSM Music Theory and Practical Grade 4 and above (previous requirement)

For Parents to Note:

- ✓ Child's **Interest** and **Choice** in the selected coursework subject is important (i.e. 2 years of upper secondary)
- ✓ If demand exceeds available places i.e. safety ratio 1:20, offered to students based on **Merit**
- ✓ **Parental support** is essential (**Mar & June holidays** necessary for completion of GCE coursework in Sec 4s and 5s)
- ✓ Coursework subject is a **GCE subject** and can be one of the subjects for computation to IHL admission
- ✓ Coursework subject can be a “**relevant**” subject for some Polytechnic courses (but it is NOT a compulsory subject)

Diploma in Product & Industrial Design

Diploma in Food, Nutrition & Culinary Science

Diploma in Music and Audio Technology

Diploma in Apparel Design and Merchandising



Science

Mr Harms Collin (HOD Science)

Sec 3 Normal (Technical) Science Content

Lower Secondary	Upper Secondary
Force, Energy Electricity, Heat	Energy, Wave, Effects of Forces Electricity,
Matter, Water & Air Pollution	Sources of Food, Food Chemistry, Food Safety, Staying Healthy, Digestion, Breathing, Blood Circulation
Cells, Nutrients from food, Human Reproduction, Taking good care of Body	

Assessment

Paper	Type of paper	Duration	Marks	Weighting
1	E-Examination Multiple choice, selected response, short-answer and structured	1 h 15 min	50	50%
2	Short-answer and structured	1 h	50	50%

Sec 3 Normal (Academic) & Sec 3 Express Science

Sec 3 NA	Sec 3 EX
Science(Physics/Chemistry) Science(Chemistry/Biology)	Science(Physics/Chemistry) Science(Chemistry/Biology) Pure Biology Pure Chemistry Pure Physics

	Biology	Chemistry	Physics
Topics in Lower Thematic Sec Science	<p>Cells Structure and Organisation, Nutrition in Humans Reproduction, Organisms & their Environment</p>	<p>The Particulate Nature of Matter, Patterns in the Periodic Table Organic Chemistry</p>	<p>Kinematics Thermal Processes Current of Electricity</p>
Themes or Sections in Upper Sec Science	<p>Cells and the Chemistry of Life The Human Body – Maintaining Life Living Together – Plants, Animals and Ecosystems Continuity of Life</p>	<p>Matter – Structures and Properties Chemical Reactions Chemistry in a Sustainable World</p>	<p>Measurement Newtonian Mechanics Thermal Physics Waves Electricity & Magnetism Radioactivity</p>

Assessment

science

Sec 3 Normal (Academic)

Paper	Type of Paper	Duration	Marks	Weighting
1	Multiple Choice (Physics)	1 hour 15 minutes	20	20%
2	Structured (Physics)		30	30%
3	Multiple Choice (Chemistry)	1 hour 15 minutes	20	20%
4	Structured (Chemistry)		30	30%

Pure Science vs Science(Che/Bio) OR Science(Phy/Che)

	Pure	Sci(Che/Bio) OR Sci(Phy/Che)
Assessment Format	Paper 1 MCQ (1h)	Paper 1 MCQ (1h)
	Paper 2 Structured, Free Response (1h 45min)	Paper 2 Sci(Phy) (1h 15min) Paper 3 Sci(Che) (1h 15min) Paper 4 Sci(Bio) (1h 15min)
	Paper 3 Practical (1h 50 min)	Paper 5 Practical (1h 30min)



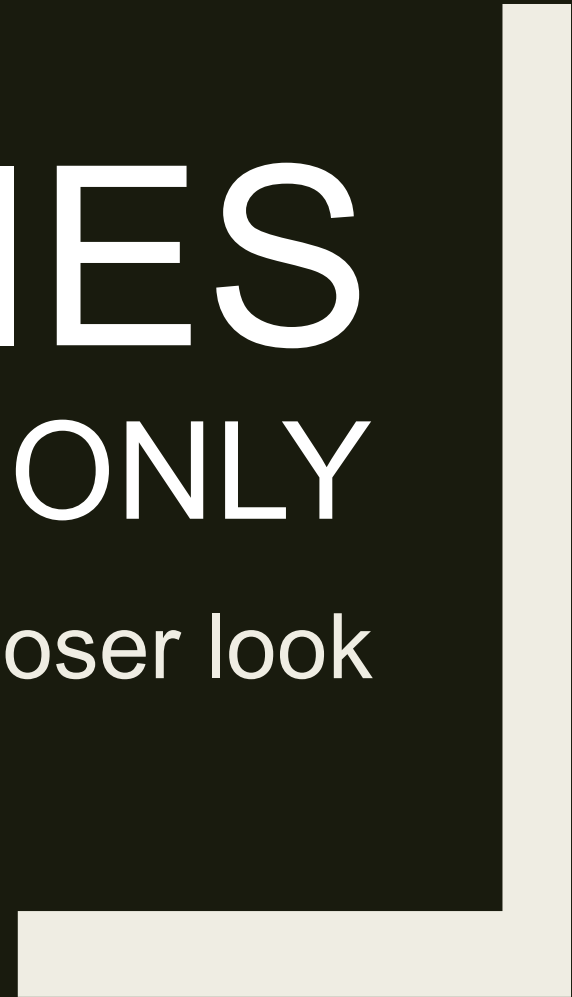
Humanities

Ms. Farah Ibrahim (HOD Humanities)

HUMANITIES

FOR NA & EX ONLY

Taking a closer look



AIMS

Elements of Business Skills (For NT only):

The syllabus intends for students to develop knowledge and understanding of:

- To develop knowledge on basic business activities in the Travel and Tourism, Hospitality, and Retail industries.
- To understand basic marketing that focuses on understanding the needs and wants of customers and the marketing mix.
- To understand basic customer relations focusing on communicating with customers and providing quality customer service.

AIMS

Social Studies (For NA and EX only):

- Seeks to **develop the competencies** of our students to be informed, concerned and participative citizens.
- Aims to ignite students' curiosity to **inquire into real-world issues** that concern their lives.
- Helps students to attain relevant knowledge and understanding about these issues, develop critical and reflective thinking skills, and appreciate **multiple perspectives**.

AIMS

History (For NA and EX only):

- Seeks to equip students with the necessary historical knowledge, understanding, dispositions and skills to understand the present and contribute actively and responsibly as local and global citizens.
- To develop in students the ability to organise and communicate their historical knowledge and understanding through a variety of ways using different media.
- To engage students actively in historical inquiry so as to develop them into confident, self-directed, critical and reflective thinkers.

AIMS

Geography (For NA and EX only):

- Seeks to understand geographical phenomena and processes that occur in Singapore and beyond.
- Seeks to understand sustainable development and approaches that enhance the sustainability of our world at various scales.
- Helps students to apply geographical methods of inquiry to investigate selected natural and human phenomena and processes.

AIMS

Literature (For NA and EX only):

- To empower students to make meaning of texts, and see themselves and the world from diverse perspectives.
- To raise awareness of timeless issues concerning society.
- To inspire students to empathise with others and to find their own voice as they reflect on the human condition with sensitivity, and to consider the impact of their beliefs and actions on society.

ASSESSMENT

HUMANITIES: SOCIAL STUDIES (50%) + AN ELECTIVE (50%)

COMPULSORY: SOCIAL STUDIES	GEOGRAPHY ELECTIVE	HISTORY ELECTIVE	LITERATURE ELECTIVE
<p>Issues:</p> <ul style="list-style-type: none">- Exploring Citizenship and Governance- Living in a Diverse Society- Being Part of a Globalised World	<p>Themes:</p> <ul style="list-style-type: none">- Geography in Everyday Life- Climate- Tourism	<p>Units:</p> <ul style="list-style-type: none">- Challenges to European Dominance after WWI (1910s-1942)- Developments in the Post-WWII World: The Cold War (1940s)	<ul style="list-style-type: none">- Prose- Unseen poetry

What's the Difference?

FULL GEOGRAPHY	FULL HISTORY	FULL LITERATURE
<p>Themes:</p> <ul style="list-style-type: none">- Geography in- Everyday Life- Climate- Tourism- Tectonics- Singapore	<p>Units:</p> <ul style="list-style-type: none">- Extension of European Control in SEA and Challenges to European Dominance (1870s-1942)- Developments in the Post-WWII World: Decolonisation and the Cold War (1940s-1991)	<ul style="list-style-type: none">- Drama- Prose- Unseen Poetry



Mathematics

Ms. Ong Jing Hui (HOD Mathematics)

Elementary Maths (Sec 1 to 4)

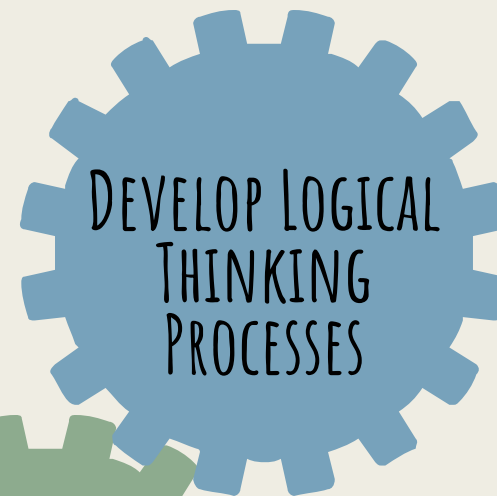
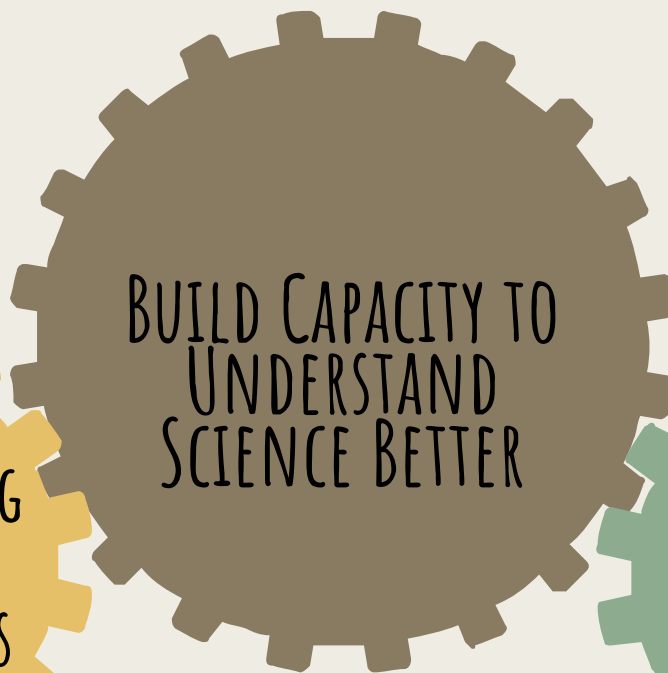
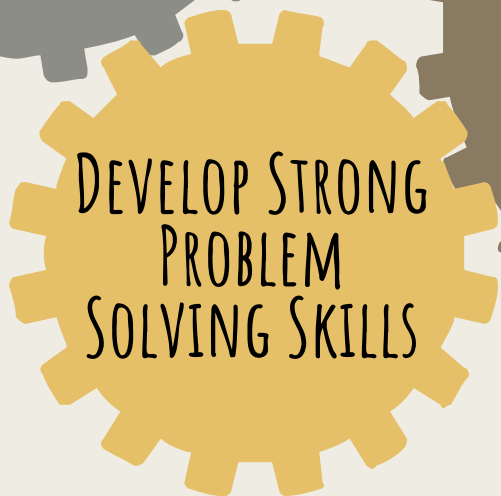
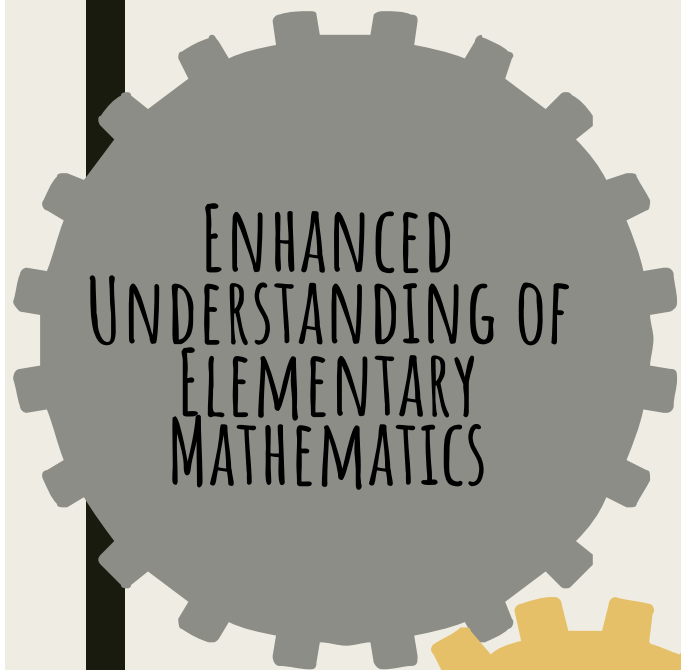
Provides the foundation for

1. Basic Problem Solving Skills
2. Basic Mathematics knowledge in
 - Numbers and Algebra
 - Geometry
 - Statistics
3. The use of mathematics on a day-to-day basis

Additional Mathematics (Sec 3 and 4) (For NA & EX only)

Provides the opportunity to

1. Apply Problem Solving Skills in more complex situations
2. Learn basic modelling by relating Real World contexts to graphs and to algebra
3. Build the capacity for learning Professional and/or Academic mathematics in the future





OPPORTUNITIES TO DISCUSS
MATHEMATICS



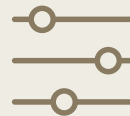
OPPORTUNITIES TO EXPLAIN
THOUGHT PROCESS TO TEACHERS
AND PEERS



EXPLORE AND DEEPEN UNDERSTANDING
OF CONCEPTS THROUGH VARIED
APPROACHES



MORE IN-DEPTH EXPERIENCE IN
PROBLEM SOLVING



GUIDED EXPERIENCE IN
WRITING LOGICAL PROOFS



OPPORTUNITIES TO DRAW LINKS
BETWEEN NUMBERS, ALGEBRA AND
GRAPHS

Home Tutor Interaction

- Subjects offered in 2023
- Post Secondary pathways
- Q&A