# Secondary 2 SOE Talk 24 May 2019

(The slides used for this session can be accessed via Parents Gateway)







# Objectives



Highlight key considerations when deciding on subject options



Provide information about subjects for which choice is given and options must be exercised



Clarify doubts regarding the year end Subject Option Exercise (SOE)









#### **Flow of Events**

Address by Vice Principal, Ms Deborah Tan

Briefing by Subject Head of Science Department, Mr Traven Loh

Briefing by Head of Applied Studies Department, Mrs Juliana Ng

Briefing by Head of Humanities Department, Mr Timothy Boay







# Address by Vice Principal Ms Deborah Tan





## End of Sec 2

#### 4/5 Year Secondary Programme

Sec 1

Transiting to Sec School

Sec 2

Subject Options for Sec 3 Sec 3 Sec 4 Sec 5

GCE 'N'/ 'O' GCE 'O' Level Exam Level

Journey Exam

# Important Next Step

4/5 Year Secondary Programme			
Sec 2 Sec 3 Sec 4 Sec 5		Sec 5	
<ul><li>EOY Exam</li><li>Subject Options Exercise (SOE)</li></ul>	■ GCE 'N' Level E	xam Journey	■ GCE 'O' Level Exam Journey





#### GCE 'O' Level Examinations Secondary 5 N(A) GCE 'N' Level GCE 'N' Level Examinations Examinations Sec 4 Express Secondary 4 N(A) Secondary 4 N(T) Secondary 3 N(A) Secondary 3 N(T) Sec 3 Express Sec 2 Express Secondary 2 N(A) Secondary 2 N(T) Secondary 1 N(A) Secondary 1 N(T) Sec 1 Express Primary School Leaving Examination (PSLE)

# Promotion Criteria 2N(T)

Criteria	Status
<ul><li>Performed exceptionally well</li><li>At least 70% or higher in average for all subjects</li></ul>	Transferred to Sec 2 N(A)
<ul> <li>Met minimum criteria</li> <li>Pass EL or Mathematics, and</li> <li>Pass in any 1 subject</li> </ul>	Promoted to Sec 3 N(T)
Did not meet minimum criteria	Advanced to 3 N(T) Retained in Sec 2 N(T)

# Promotion Criteria 2N(A)

Criteria	Status
<ul><li>Performed exceptionally well</li><li>At least 70% or higher in average for all subjects</li></ul>	Transferred to Sec 3 Exp
<ul> <li>Met minimum criteria</li> <li>Pass EL <u>and</u> 2 other subjects</li> <li>Pass in <u>any 4</u> subjects</li> </ul>	Promoted to Sec 3 N(A)
Did not meet minimum criteria	Advanced to 3 N(A) Retained in Sec 2 N(A) Transferred to Sec 3 N(T)

# 4 Key Guiding Questions





# 4 Key Guiding Questions

#### 1. Strength

What am I good in? What are my strengths?

### 2. Aspirations

What do I want to do after secondary school?

#### 3. Manageability

What curriculum load can I cope with?

### 4. Eligibility

Do I meet the criteria to offer the subject?









## Your Support and

#### Partnershin

#### Strengths and Aspirations



#### 1. Strength

- What am I good in? What are my strengths?
- 2. Aspirations
  - What do I want to do after secondary school?
- 3. Manageability
  - What curriculum load can I cope with?
- 4. Eligibility
  - Do I meet the criteria to offer the subject?



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Loyalty . Industry . Sincerity . Love





Our SOE is aligned to our belief that every child is unique and has different strengths:

#### About **flexibility in**

- choice of Science, Humanities and Applied Studies subjects
- choice to offer higher level subjects where relevant while ensuring a holistic schooling experience for all





### Your Support and

#### Partnership

Normal (Technical) Course

Core	Discipline	Option	Choice
EL	Science*		
BMT	1 subject	Combined Science at	CH-BI/ PH-CH
MA	*Only for students on SBB	NA Level	
SC (T) CPA	Applied Studies  1 subject	NT Level	EBS/ DT/ FS/ MU/ MR

Subjects highlighted in red are also SBB subjects (i.e. study of these subjects at N(A)/ Exp levels are offered to students who meet the eligibility criteria)



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## Your Support and

Normal (Academic) Course

Core	Discipline	Option	Choice	By Offer
EL	Science			
MTL MA	1 subject	Combined	CH-BI/ PH-CH	
Social	Humanities 1 subject	Elective (compulsory)	GE/ HI/ Lit in Eng	
Studies (Half of Elec	,			
Hum)	POA/Applied Studies		DT/ FN/POA	AR/ MU
	1 subject		DIJ I NJI OA	AN MO
	Mathematics	Nil	Nil	A MA

Subjects highlighted in red are also SBB subjects (i.e. study of these subjects at N(A)/ Exp levels are offered to students who meet the eligibility criteria)











# **Academic Syllabuses**

Information about subjects from Singapore Examination and Assessment Board website

https://www.seab.gov.sg/









Important decision for parents whose child is currently on SBB programme, or are offered Out-of-Stream (OOS) subject at Sec 3

Qns: Should my child continue to be on the SBB programme or take up OOS subjects offered by the school at Upper Secondary level?







Post secondary pathways for students on the Normal courses



**Nitec Programmes** 

Secondary 4 N(A)



Polytechnic Foundation Programme (PFP)



Direct-Entry-Scheme to Polytechnic Programme (DPP)



**Nitec Programmes** 



Secondary 5 N(A)



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A strong literacy and numeracy foundation would help ensure students are better prepared for these progression pathways

 All students are encouraged to deepen their knowledge in English, Mathematics and Science





#### Posting of applicants to ITE Nitec courses

- Posting is based on merit & subject to vacancies in open competition
  - aggregate of the best 4 GCE 'N' Level subjects, including pre-requisite subjects and bonus points (where applicable); and
  - Met course-specific entry requirements





#### ITE Minimum Entry Requirements

Business Services	GCE 'N' Level Passes (Grade A-D or Grade 1-5) in <b>English</b> , and two other subjects, OR  2 GCE 'O' Level Grades (Grade 1-8) in any two subjects ( <b>English</b> , <b>Maths</b> , <b>Mother Tongue language</b> , <b>Science</b> )
Applied Food Science & Nursing	3 GCE 'N' Level Passes (Grade A-D or Grade 1-5) in <b>Maths, Science</b> , and one other subject, <i>OR</i> 2 GCE 'O' Level Grades (Grade 1-8) in <b>Maths</b> and <b>Science</b>
Aerospace Machining Technology	3 GCE 'N' Level Passes (Grade A-D or Grade 1-5) in 'Maths or Science', and two other subjects, OR 2 GCE 'O' Level Grades (Grade 1-8) in any two subjects (English, Maths, Mother Tongue language, Science)







#### Computation of ITE aggregate points

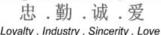
Computation of ITE aggregate points for N(A) and N(T) subject grades for merit-based admission

N(T) Grade	ITE Aggregate Point
Α	1
В	2
C	3
D	4
U	5

N(A) Grade	ITE Aggregate Point
1,2	1
3	2
4	3
5	4
U	5



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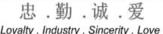
### ITE bonus points

Bonus points are awarded when an applicant has been deemed eligible and is being considered for posting based on merit

Types of Bonus Points	Number of Bonus Points Awarded
N(A) Passing Grades: Grades 1–5 for pre-requisite subjects (e.g. English, Mathematics, Science) for the course applied for	2 points for each pre-requisite subject, up to a max of <u>4 points</u>
<ul> <li>CCA Grades</li> <li>A1 – A2</li> <li>B3 – C6</li> </ul>	2 points 1 point



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For students on N(A) course offering Exp level subjects, GCE 'O' and 'N' Level results may be combined to compute the aggregate score, for merit-based admission into PFP and DPP

GCE 'O' Level Grade	GCE 'N' Level Grade
A1 – B3	1
B4 – C6	2
D7 E8 (for DPP only)	3

Grade Conversion Table for 'O' Level to 'N' Level Grade

#### Minimum Entry Requirements for PFP

Course cluster	Minimum entry requirements
<ul> <li>Applied Sciences</li> <li>Business &amp; Management</li> <li>Built Environment</li> <li>Engineering</li> <li>Health Sciences</li> <li>Information &amp; Digital Technologies</li> <li>Maritime Studies</li> <li>Media &amp; Design</li> </ul>	<ul> <li>ELMAB3 ≤ 12</li> <li>EL ≤ 3</li> <li>MA ≤ 3</li> <li>Comb Sci / F&amp;N / D&amp;T ≤ 3</li> <li>Any other two subjects ≤ 3</li> <li>Meet subject-specific minimum entry requirements</li> </ul>
<ul> <li>Business &amp; Management</li> <li>Humanities</li> <li>Media &amp; Design</li> </ul>	<ul> <li>ELMAB3 ≤ 12</li> <li>EL ≤ 2</li> <li>MA ≤ 3</li> <li>POA / E Lit / Hist / Geog / Comb Humans / Art ≤ 3</li> <li>Any other two subjects ≤ 3</li> <li>Meet subject-specific minimum entry requirements</li> </ul>

Refer to <a href="https://pfp.polytechnic.edu.sg/PFP/index.html">https://pfp.polytechnic.edu.sg/PFP/index.html</a> for full range of courses and subject-specific minimum entry requirements.

#### Minimum Entry Requirements for DPP

Course cluster	Minimum entry requirements
<ul><li>Applied Sciences</li><li>Engineering</li><li>Info-Communications Technology</li></ul>	<ul> <li>ELMAB3 ≤ 19</li> <li>EL ≤ 4</li> <li>MA ≤ 4</li> <li>Any other three subjects ≤ 5</li> <li>Meet subject-specific minimum entry requirements</li> </ul>
Business & Services	<ul> <li>ELMAB3 ≤ 19</li> <li>EL ≤ 3</li> <li>MA ≤ 4</li> <li>Any other three subjects ≤ 5</li> <li>Meet subject-specific minimum entry requirements</li> </ul>

Refer to <a href="https://www.ite.edu.sg/wps/portal/definitely-dpp/">https://www.ite.edu.sg/wps/portal/definitely-dpp/</a> for more information.

#### **Note**

**For PFP**, GCE 'O' Level grades of E8 & F9 and GCE N(A) grade of U will not be considered for computation of the aggregate score

**For DPP**, GCE 'O' Level grade of F9 and GCE N(A) grade of U will not be considered for the computation of the aggregate score

Key Implication:

Help your child find his/ her strength









Make an appointment to meet your child's Form Teachers to discuss possible subject options









# Thank you





# Briefing by Subject Head of Science Department Mr Traven Loh <loh\_wei\_chuen@moe.edu.sg>





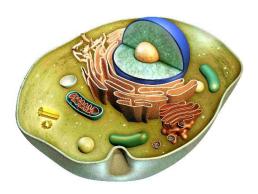


is all around us



#### **Biology**

The study of **life** and **living organisms**... including their physical structure, function, growth and evolution





#### Chemistry

The study of the composition, structure, properties and change of **matter**... known as the 'central science' that bridges physics and biology

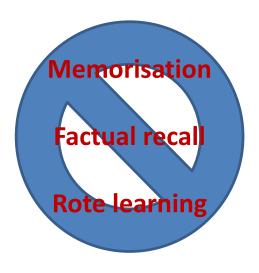
#### **Physics**

The study of matter & its motion through space & time... the concepts of energy & forces... how the universe behaves...





## The Science Syllabuses



Much greater emphasis on the understanding and application of scientific concepts and principles

More focus on practices of science that highlight the ways of thinking and doing inherent in the scientific method



#### Skills, Processes, Values & Attitudes in Science



#### **Physics:**

- Able to think abstractly
- Strong mathematical foundation
- Shows interest in the interactions of the physical world

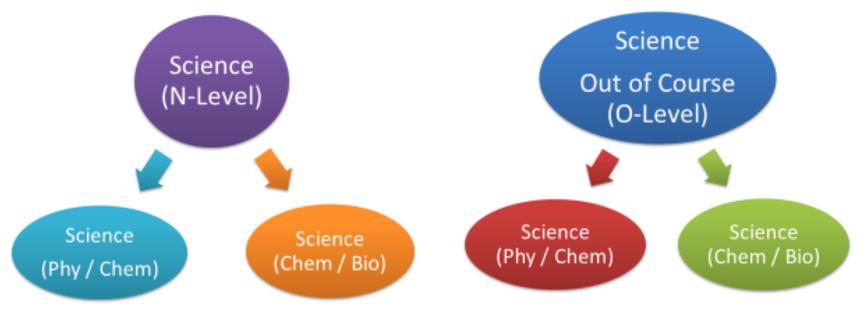
#### **Chemistry:**

- Able to think abstractly
- Able to deal with ambiguity
- Shows interest in understanding transformation of matter at the atomic/molecular level

#### **Biology:**

- Able to appreciate cause and effect relationships
- Strong language ability
- Shows interest in living systems and the natural world

## Science Subjects in Upper Sec (NA)

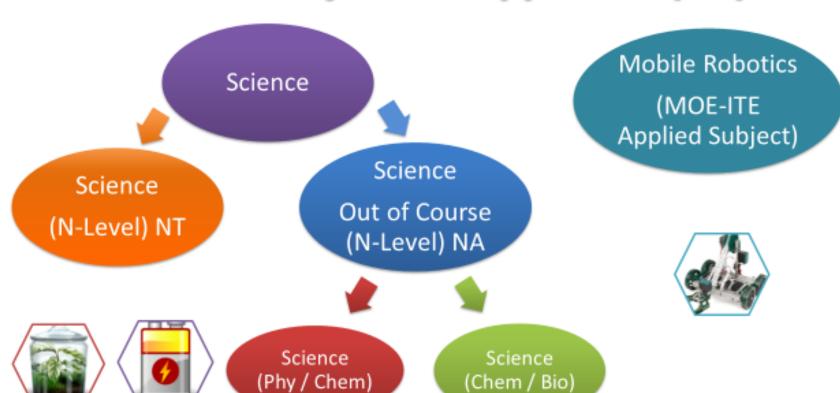








## Science Subjects in Upper Sec (NT)

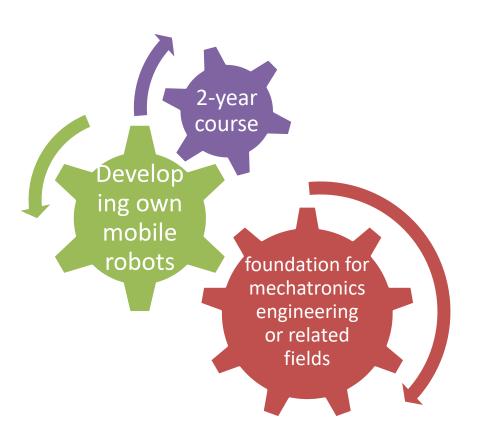


## **Mobile Robotics**

MOE-ITE Applied Subject



## **Mobile Robotics**



MOE-ITE
Applied Subject

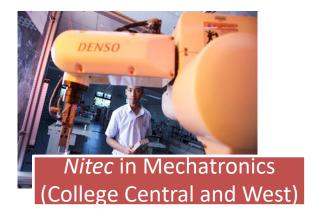




- Basic Electricity
- Basic and Digital Electronics



## **Related Courses in ITE**











## **Assessment**

#### **Overview**

- Mobile Robotics –
   Introduction
- Design

#### **Electricity and Electronics**

- Basic Electricity
- Basic and Digital Electronics
- Input-Output Device

#### **Robotics**

- Simple Mechanism
- Material and Practical Processes
- Integration

N-Level Paper 2 (Practical)

in Secondary 3

N-Level Paper 3 (Practical)

in Secondary 4

N-Level Paper 1 (Theory)

in Secondary 4



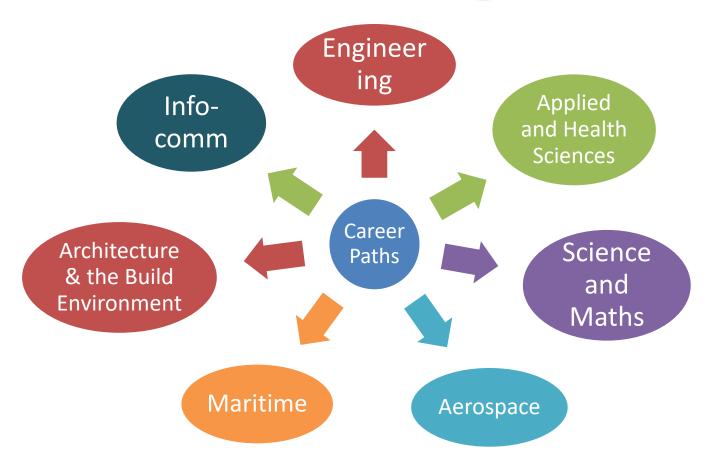
## **Special Note**

Mobile Robotics cannot be offered concurrently with Design & Technology, in view of the overlapping content between the two syllabuses.

MR can be used in **lieu of N(T) Maths or Science** for admission into selected *Nitec* courses that require a pre-requisite pass in these subjects

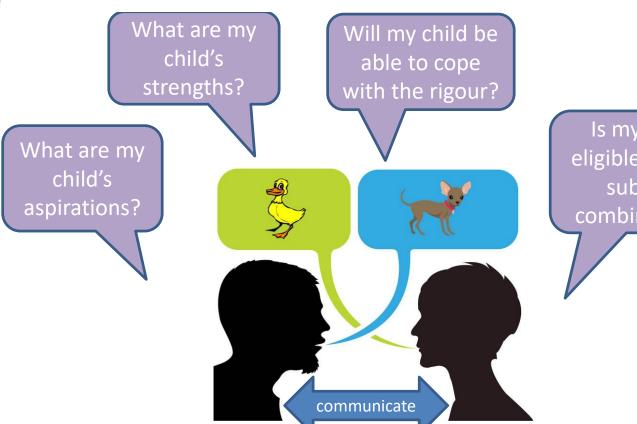


## Value of Offering Science





## **Key Considerations**



Is my child eligible for the subject combination?



## **Download Syllabuses from SEAB**

Subject	Code
Combined Science (O-Level) EXP	5076/ 5078
Combined Science (N-Level) NA	5105/ 5107
Science Syllabus T (NT-Level)	5148
Mobile Robotics	A101

EXP: <a href="https://www.seab.gov.sg/home/examinations/gce-o-level/o-level-syllabuses-examined-for-school-candidates-2020">https://www.seab.gov.sg/home/examinations/gce-o-level/o-level-syllabuses-examined-for-school-candidates-2020</a>

NT: <a href="https://www.seab.gov.sg/home/examinations/gce-n(a)-level/n(a)-level-syllabuses-examined-for-school-candidates-2020">https://www.seab.gov.sg/home/examinations/gce-n(a)-level/n(a)-level-syllabuses-examined-for-school-candidates-2020</a>

NA: <a href="https://www.seab.gov.sg/home/examinations/gce-n(t)-level/n(t)-level-syllabuses-examined-for-school-candidates-2020">https://www.seab.gov.sg/home/examinations/gce-n(t)-level/n(t)-level-syllabuses-examined-for-school-candidates-2020</a>

# Briefing by Head of Applied Studies Department Mrs Juliana Ng <goh\_wee\_peng@moe.edu.sg>





## **Applied Studies Subjects**

#### Subjects offered at N(A) Level

- 1. Art
- Design and Technology
- 3. Food and Nutrition

#### Subjects offerd at N(T) Level

- Design and Technology
- 2. Elements of Business Studies
- 3. Food Studies
- 4. Music

**ART at N(A) Level (6125)** provide students with an opportunity to give form and meaning to their ideas, thoughts and feelings through visual and tactile forms

#### **Assessment Format**

Syllabus	Paper 1	Paper 2
O* & N Level	60%	40%
	Preparatory Study + Final Work	Preparatory Study + Drawing and Painting Examination

<sup>\*</sup> For O Level, school is not offering the option of Paper 3 Study of Visual Arts







Recommended for talented art students who will benefit from an individualised, process-based

learning experience













#### **NT Music 6129**

- provides scope for students to develop their musical perception, broaden their knowledge of music from a wide repertoire and make music, both individually and in groups
- fosters a lifelong interest in music of all kinds



#### **NT Music 6129**

Beyond knowing about different musical styles, students will

Understand the contexts and functions of music, e.g.

Music in dance, film and media

Experience music arranging with technology

- Create arrangements and backing tracks for existing songs and music
- Apply music technology effects

Experience music performing with technology

Perform with backing tracks





#### **Assessment Format**

	Paper 1	Paper 2
Music NT 6129	50%	50%
	Written Examination	Coursework



## Design & Technology NA Level (7055) and NT (7062)

 develop dispositions for enterprise, creativity and innovation through research and exploration, idea conceptualisation and development, communication, and working with materials and tools in response to needs identified





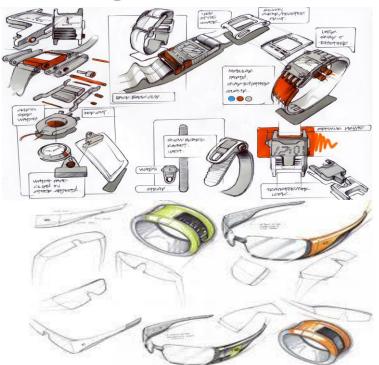
#### **Assessment Format**

	Paper 1	Paper 2
Normal (Academic)	40%	60%
DT 7055	Written Paper	Design Project
Normal (Technical)	30%	70%
DT 7062	Written Paper	Design Project





## **Design Journal**





#### Design Specification & Brief

Situation: Today, 80% of the residents in Singapore are living in HDB flats. Singaporeans treat the corridor as theirs by placing their Shoe racks, plants, clothes hanger and chair there. The most common items that singaporeans put in their corridor are flowerpots. Many Singaporeans place their flowerpots messily at the corridor. This will be a safety hazard as it will obstruct the corridor pathway. Therefore, it is important to maintain tidiness along arridors.

Design and make a product that enables the user to arrange their flowerpot neatly to maintain the tidiness of corridor space occupied by the flower pots.

- 1) The artefact should not have any sharp
- Reason: This ensure the user do not get injuries from the handling the product
- 2) The artefact should be able to held up to 3 flowerpots. Reason: From the survey conducted, majority
- Of the people I have surveyed have 3 potted plants outside the corridor. 3) The artefact should be made of materials that are waterproof.
- Reason: The artefact will be hanged outside where it is exposed to the weather. If it starts to rain, it has to be water resistance
- 4) The artefact should be able to hold the flowerpots Reason: This will ensure the flowerpot will not drop

- Design Specification 5) The artefact should be attractive and aesthetic good looking
  - Reason: The artefact will be displayed and should beautify the corridor 6) The artefact should help to reduce the amount of space
  - Occupied at the corridor. Reason: This allows the user to maintain the tidiness
  - of the corridor space occupied by the flower pot and also reduce obstruct of the corridor pathway.
  - 7) The artefact should be able to hold different sizes of flowerpot ranging from 100m to 200mm diameter. Reason: Flowerpots come in many different sizes.
    - From research, most of the flower pots found outside HDB corridor are between 100 - 200 mm

## **Artefact**





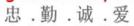








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### **Presentation board**







### N(A) Food and Nutrition 6072

 Heighten understanding of concepts of nutrition and meal planning and principles of food science









#### **Assessment Format**

	Paper 1	Paper 2
Food and	40%	60%
Nutrition	Written Paper on nutrition,	Coursework component in
6072	concept of a balanced diet	response to a given task; to apply
	and basic principles	skills of analysis, planning,
	underlying food preparation	application and evaluation when
		completing the tasks





### Food Studies N(Technical) (6079)

 equip students with knowledge of food commodities and basic concepts of nutrition and meal planning, and impact on health

 lay the foundation for students to pursue further learning in courses related to the food industry



#### **Food Studies 6079**



#### Chicken Burger

Strength	Elaborate on strengths
The patty turn out nice and correct size for	I chopped the chicken small and finely. It
a primary school children	did not break apart while frying
The burger bun rise up nice and looks like a	
burger bun	long Yeast did not die due to temperature
	and correct amount of flour
Burger bun shape is good and it is	I let the dough rest for exact 15 minutes. So
appealing for children	the dough able to 'expand' well

10/	Cl-b4-	The mistales I as a de	
Weakness	Elaborate	The mistake I made	How to improve
One of the burger bun still has flour on it	While making the dough into a bun , I added slightly too much flour as the dough is sticky	Added too much flour and never put a bit of water to prevent the dough become too dry then fall apart	while making the dough into a bun, Make sure that I do not add too much flour and if I did, add in a bit of water so it will not be too
			dry .
The burger bun are two different sizes	I make the burger bun into two which is supposed to be 1 so I decided to make into two small burger	Did two bun when I am supposed to do 1 and never make the two bun equal size	I must be aware that the dough only make into one and not two unless I making it into smaller burgers and









#### **Assessment Format**

	Paper 1	Paper 2
Food Studies	40% 1 hr 30 min Written Paper On knowledge of theory and practice as specified in the syllabus	60% 35 hrs Coursework component in response to a given task apply knowledge and understanding in relation to the subject content to the task





# ELEMENTS OF BUSINESS SKILLS (EBS) AT N(T) LEVEL (7066)

 learning of business and enterprise in the service sector (with particular emphasis on retail, travel and tourism, and hospitality industries)



















#### **Assessment Format**

		Paper 1	Paper 2
E	3S	60%	40%
		1 hr 30 min	20 hours Coursework:
		Written Paper	requires candidates to conduct research on a business in one of the 3 service industries in the Singapore context and make recommendations on how the business can improve its marketing mix or customer service





# Briefing by Head of Humanities Department Mr Timothy Boay <timothy\_boay@moe.edu.sg>





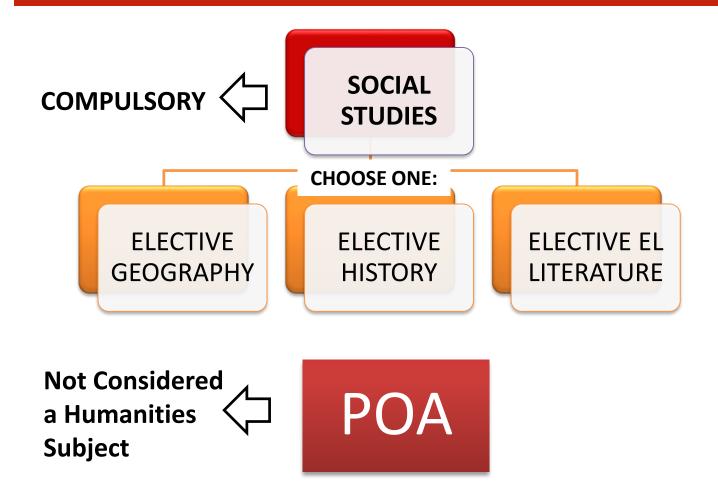
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# N LEVEL HUMANITIES (Subject Overview)





#### **HUMANITIES** (FOR ALL STUDENTS)



## HUMANITIES

(ASSESSMENT FORMAT + TOPICS TAUGHT)





# HUMANITIES (SOCIAL STUDIES) (compulsory for all students)



1 paper (50%)

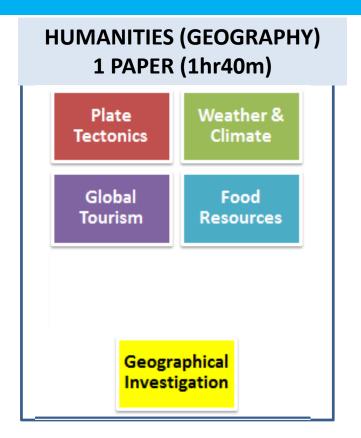
1 hr 45 mins

- Source-Based Case Study
- 2. Structured Response Questions





# GEOGRAPHY (Offered as an Elective Humanities)



## YOU SHOULD CHOOSE GEOGRAPHY, IF YOU ARE:

#### **Attitude**

- Curious about the formation of earth and physical environment
- Keen interest in global trends and current affairs about society, economy and politics.
- Inquisitive, self directed and reflective in seeking geographical insights.

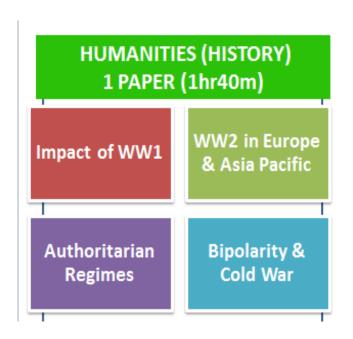
#### **Aptitude**

- Able to make clear and reasonable explanations.
- Able to make connections between human-physical relationships at various scales.
- Able to make informed judgement and sound decisions through analysis, synthesis and evaluation of geographical information.



## **HISTORY**

(Offered as an Elective Humanities)



## YOU SHOULD CHOOSE HISTORY, IF YOU ARE:

#### **Attitude**

- Empathetic understands the reasons of past developments without imposing judgement on present day norms.
- **Balanced** –considers and respects different points of viewpoints.
- **Enquiring** ask questions to uncover and understand the past.
- **Discerning** understand sources beyond face value

#### **Aptitude**

- Able to make clear and reasonable explanations and historical interpretation.
- Methodical Employs comprehensive effort when engaged in historical enquiry.
- Knowledgeable and familiar with key forces and personalities that have shaped the world.



## PRINCIPLES OF ACCOUNTING

(Offered as a non-Humanities subject)



The Roles of Accounting



The Accounting Information System



Elements of the Financial Statements



**The Financial Statements** 

2 papers

1 hr/2hrs

- 1. Structured Questions
- 2. Preparing Financial Statements



**Business Entities** 

## YOU SHOULD CHOOSE PRINCIPLES OF ACCOUNTS, IF YOU ARE:

#### **Attitude**

- Being interested in accounting and aware of further pathways in accounting.
- Integrity and Objectivity in business ethics.
- Social responsibility, and how it can affect users of financial information.

#### **Aptitude**

- logical,
- methodical,
- consistent and
- accurate.





**OR VISIT:** 

http://www.seab.gov.sg

For my information and details of the syllabus







# (HUMANITIES) LITERATURE IN ENGLISH

(Please approach Mr Brandon Chai after the briefing)



