

# BARTLEY SECONDARY SCHOOL 

2024 SECONDARY THREE SUBJECT OPTIONS EXERCISE

INFORMATION BOOKLET<br>FOR<br>SEC 2 STUDENTS \& PARENTS

Table of Contents
Promotion Criteria for Secondary 2 students ..... 3
Secondary 2 Express to Secondary 3 Express ..... 3
Secondary 2 Normal (Academic) to Secondary 3 Normal (Academic) ..... 3
Secondary 2 Normal (Academic) to Secondary 3 Express ..... 3
Secondary 2 Normal (Technical) to Secondary 3 Normal (Technical) ..... 3
Secondary 2 Normal (Technical) to Secondary 2 Normal (Academic) ..... 3
Sec 3 Subject Options Exercise .....  .4
How is the subject options derived? ..... 4
Key Considerations when choosing Subject Options ..... 4
Important Dates ..... 5
Procedure for Allocation of Subject Options ..... 5
Procedure for Changing of Subject Combination ..... 5
Subject Options 2024 .....  .6
Subject Options for Sec 3 Express Course ..... 6
Subject Options for Sec 3 Normal (Academic) Course ..... 9
Subject Options for Sec 3 Normal (Technical) Course ..... 10
Criteria to Offer Out-of-Stream Subjects ..... 11
Subject Information ..... 12
Aggregate Computation for admission to post-secondary institutions ..... 18
Useful Information on admission to post-secondary institutions ..... 20
Frequently Asked Questions ..... 21

## Promotion Criteria for Secondary 2 students

Secondary 2 Express to Secondary 3 Express
Minimum Attainment Level
$\checkmark$ Pass in English Language
$\checkmark$ Pass in Overall percentage of All subjects combined
$\checkmark$ Students who have not met the minimum attainment level will be laterally transferred to Sec 3 Normal (Academic).
$\checkmark$ There is no retention at Sec 2 Express.
Secondary 2 Normal (Academic) to Secondary 3 Normal (Academic)
Minimum Attainment Level
$\checkmark$ Grade 5 or better in English Language and 2 other subjects OR
$\checkmark$ Grade 5 or better in 4 subjects
$\checkmark$ Students who have not met the minimum attainment level will be retained at Sec 2 Normal (Academic)
Secondary 2 Normal (Academic) to Secondary 3 Express
Criterion
$\checkmark$ Attain a minimum of $70 \%$ in the overall percentage of ALL subjects combined
Secondary 2 Normal (Technical) to Secondary 3 Normal (Technical)
Minimum Attainment Level
$\checkmark$ Grade D or better in 2 subjects, one of which should be English Language or Mathematics
$\checkmark$ Students who have not met the minimum attainment level will be retained at Sec 2 Normal (Technical)
Secondary 2 Normal (Technical) to Secondary 2 Normal (Academic)

## Criterion

$\checkmark$ Attain a minimum of $70 \%$ in the overall percentage of ALL subjects combined

## Sec 3 Subject Options Exercise

How is the subject options derived?
$\checkmark$ Subject Options are reviewed annually and the eventual options are based on the following factors

- Strengths and aptitudes of our students;
- Availability of physical resources such as workshops, laboratories, computer laboratories, art studios, etc.;
- Availability of teaching staff with expertise for specific subjects;
- Requirements at post-secondary institutions such as junior colleges, polytechnic and ITE
- Performance of past cohort of students at national examinations.
- Minimal number of eligible students choosing the subject options
$\checkmark$ The finalized subject options to be offered will only be shared with students in October.


## Key Considerations when choosing Subject Options

$\checkmark$ Personal Strengths \& Interest

- Everyone has his/her unique strengths and interests. Students perform best if they are learning subjects that they are good at and interested in.
- Students should not choose a subject options just because their friends are choosing them.
$\checkmark$ Criteria and Requirements
- Students should take note of the criteria for the different subject options as well as subjectspecific criteria.
- Students should identify the subjects that they have yet to meet the requirement and proactively work to improve in these subjects.
$\checkmark$ Post-Secondary Opportunities
- Students should consider the courses that they are interested to pursue after their secondary education and find out about the admission requirements for these courses.
- Students should then consider choosing subject options that give them the best chance to enroll in the preferred post-secondary courses.
- Students should consider their career aspirations and find out the relevant educational options to achieve these aspirations


## Important Dates

| Date | Events |
| :--- | :--- |
| 31 March 2023 | Sharing of Sec 3 Subject Options Exercise during Sec 2 Parent Engagement Session |
| Term 3 | Briefing on Sec 3 subjects for Sec 2 students |
| $24-26$ Oct 2023 | Sec 3 Subject Options Exercise |
| 3 Nov 2023 | Release of outcome for Sec 3 Subject Options Exercise |
| 6 - 8 Nov 2023 | Appeal for Sec 3 Subject Options |
| 15 Nov 2023 | Release of outcome for appeals for Sec 3 subject options |

## Procedure for Allocation of Subject Options

The Sec 3 Subject Option Exercise will be conducted after the End-of-Year Examination, on 24-26 Oct 2023.
For students in the Express and NA courses, they will be required to indicate their top 6 subject options, in order of preference. For students in NT courses, they will be required to indicate their top 4 subject options, in order of preference. Allocation of subject options will be conducted based on the following considerations:

1. Merits, based on their overall percentage of ALL subjects combined.
2. Criteria for subject options
3. Subject-specific criteria, for instance a minimum of $60 \%$ in Geography and English Language to offer Pure Geography
4. Students' choice of subject options, in order of preference
5. Meeting the minimum number of students to start a class. In general, the minimum number is 10.
6. Subject-specific requirement, for instance, a cap of 20 students per class for D\&T
7. Availability of teaching staff and resources, such as labs and workshops.

After the release of the outcome of the subject option exercise on $\mathbf{3}$ Nov 2023, students may put up an appeal from 6 to 8 Nov 2023. The school will deliberate on the merit of the appeal and release the outcome of the appeal on $\mathbf{1 5}$ Nov 2023.

## Procedure for Changing of Subject Combination

* Any request for changes to subject combination will NOT be considered before the end of Secondary 3 as students need time to adapt to and cope with the learning of the given subject combination at the upper secondary level.
* Approval to request for change of subject combination will take into considerations
- Students' academic achievement across all subjects;
- Teachers' feedback and recommendation;
- Students' statement stating the reasons for request and the effort they have put in to improve their results.
* Students need to submit the form for Request for Changes to Subject and a personal statement.

Subject Options 2024
Subject Options for Sec 3 Express Course

| 8-Subject Combinations |  |  |  |  |  |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| S/No. | Code | 4th | 5th | 6th | 7th | 8th | Criteria |
| 1 | 1 A | $\begin{array}{l}\text { Combined Humanities } \\ \text { (Social Studies + Geog/Hist/Lit) }\end{array}$ | $\begin{array}{l}\text { Additional } \\ \text { Mathematics }\end{array}$ | $\begin{array}{l}\text { Pure } \\ \text { Chemistry }\end{array}$ | Pure Physics | $\begin{array}{l}\text { Pure } \\ \text { Biology }\end{array}$ | $\begin{array}{l}\text { Overall } \geqslant 70 \% \\ \text { Mathematics } \geqslant 70 \% \\ \text { Science } \geqslant 75 \%\end{array}$ |
| 2 | $1 B$ | $\begin{array}{l}\text { Combined Humanities } \\ \text { (Social Studies + Hist/Lit) }\end{array}$ | $\begin{array}{l}\text { Additional } \\ \text { Mathematics }\end{array}$ | $\begin{array}{l}\text { Pure } \\ \text { Chemistry }\end{array}$ | Pure Physics | $\begin{array}{l}\text { Pure } \\ \text { Geography }\end{array}$ | $\begin{array}{l}\text { Overall } \geqslant 70 \% \\ \text { Mathematics } \geqslant 70 \% \\ \text { Science } \geqslant 70 \% \\ \text { Geog } \geqslant 70 \%\end{array}$ |
| EL $\geqslant 60 \%$ |  |  |  |  |  |  |  |$]$


| 7-Subject Combinations (Pure Sciences) |  |  |  |  |  |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :---: |
| S/No. | Code | 4th | 5th | 6th | 7th | Criteria <br> 4 |  |
| 2A | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Additional <br> Mathematics | Pure <br> Chemistry <br> Mathematics $\geqslant 60 \%$ <br> Science $\geqslant 70 \%$ |  |  |  |  |
| 5 | 2B | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Principles of <br> Accounts | Pure <br> Chemistry | Pure Physics | Overall $\geqslant 55 \%$ <br> Science $\geqslant 70 \%$ |  |
| 6 | 2C | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Additional <br> Mathematics | Pure <br> Chemistry | Pure Biology | Overall $\geqslant 55 \%$ <br> Mathematics $\geqslant 60 \%$ <br> Science $\geqslant 70 \%$ |  |
| 7 | 2D | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Principles of <br> Accounts | Pure <br> Chemistry | Pure Biology | Overall $\geqslant 55 \%$ <br> Science $\geqslant 70 \%$ |  |

English Language, Mother Tongue Language \& Mathematics are 3 compulsory subjects

| 7-Subject Combinations (Combined Sciences) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S/No. | Code | 4th | 5th | 6th | 7th | Criteria |
| 8 | 3A | Combined Humanities (Social Studies + Hist/Lit) | Additional Mathematics | Sci (Chem/Phy) | Pure Geography | $\begin{aligned} & \text { Mathematics } \geqslant 60 \% \\ & \mathrm{Geog} \geqslant 65 \% \\ & \mathrm{EL} \geqslant 60 \% \end{aligned}$ |
| 9 | 3B | Combined Humanities (Social Studies + Hist/Lit) | Principles of Accounts | Sci (Chem/Phy) | Pure Geography | $\begin{aligned} & \mathrm{Geog} \geqslant 65 \% \\ & \mathrm{EL} \geqslant 60 \% \end{aligned}$ |
| 10 | 3C | Combined Humanities (Social Studies + Geog/Hist/Lit) | Additional Mathematics | Sci (Chem/Phy) | Art | Mathematics $\geqslant 60 \%$ |
| 11 | 3D | Combined Humanities (Social Studies + Geog/Hist/Lit) | Principles of Accounts | Sci (Chem/Phy) | Art |  |
| 12 | 3E | Combined Humanities (Social Studies + Geog/Hist/Lit) | Additional Mathematics | Sci (Chem/Phy) | Design \& Technology | Mathematics $\geqslant 60 \%$ |
| 13 | 3 F | Combined Humanities (Social Studies + Geog/Hist/Lit) | Principles of Accounts | Sci (Chem/Phy) | Design \& Technology |  |
| 14 | 3G | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Additional Mathematics | Sci (Chem/Phy) | Nutrition \& Food Science | Mathematics $\geqslant 60 \%$ |
| 15 | 3H | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Principles of Accounts | Sci (Chem/Phy) | Nutrition \& Food Science |  |
| 16 | 31 | Combined Humanities (Social Studies + Hist/Lit) | Additional Mathematics | Sci (Chem/Bio) | Pure Geography | $\begin{aligned} & \text { Mathematics } \geqslant 60 \% \\ & \text { Geog } \geqslant 65 \% \\ & \mathrm{EL} \geqslant 60 \% \end{aligned}$ |
| 17 | 3 J | Combined Humanities (Social Studies + Hist/Lit) | Principles of Accounts | Sci (Chem/Bio) | Pure Geography | $\begin{aligned} & \text { Geog } \geqslant 65 \% \\ & \mathrm{EL} \geqslant 60 \% \end{aligned}$ |
| 18 | 3K | Combined Humanities (Social Studies + Geog/Hist/Lit) | Additional Mathematics | Sci (Chem/Bio) | Art | Mathematics $\geqslant 60 \%$ |
| 19 | 3L | Combined Humanities (Social Studies + Geog/Hist/Lit) | Principles of Accounts | Sci (Chem/Bio) | Art |  |
| 20 | 3M | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Additional <br> Mathematics | Sci (Chem/Bio) | Design \& Technology | Mathematics $\geqslant 60 \%$ |
| 21 | 3N | Combined Humanities (Social Studies + Geog/Hist/Lit) | Principles of Accounts | Sci (Chem/Bio) | Design \& Technology |  |
| 22 | 30 | Combined Humanities (Social Studies + Geog/Hist/Lit) | Additional Mathematics | Sci (Chem/Bio) | Nutrition \& Food Science | Mathematics $\geqslant 60 \%$ |
| 23 | 3P | Combined Humanities (Social Studies + Geog/Hist/Lit) | Principles of Accounts | Sci (Chem/Bio) | Nutrition \& Food Science |  |

English Language, Mother Tongue Language \& Mathematics are 3 compulsory subjects
For coursework subjects, aptitude for the selected subject and teachers' recommendation will be considered

| 6-Subject Combinations |  |  |  |  |  |
| :---: | :---: | :--- | :--- | :---: | :---: |
| S/No. | Code | 4th | 5th | 6th | Criteria |
| 24 | 4 A | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Phy) | Art |  |
| 25 | 4 B | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Phy) | Design \& Technology |  |
| 26 | 4 C | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Phy) | Nutrition \& Food Science |  |
| 27 | 4 D | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Bio) | Art |  |
| 28 | 4 E | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Bio) | Design \& Technology |  |
| 29 | 4 F | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Bio) | Nutrition \& Food Science |  |

English Language, Mother Tongue Language \& Mathematics are 3 compulsory subjects
For coursework subjects, aptitude for the selected subject and teachers' recommendation will be considered

Subject Options for Sec 3 Normal (Academic) Course

| 7-Subject Combinations |  |  |  |  |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- |
| S/No. | Code | 4th | 5th | 6th | 7th | Criteria |
| 1 | 1 A | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Principles of <br> Accounts | Sci (Chem/Phy) | Art | Overall $\geqslant 60 \%$ <br> Mathematics $\geqslant 50 \%$ |
| 2 | 1 B | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Principles of <br> Accounts | Sci (Chem/Phy) | Design \& Technology | Overall $\geqslant 60 \%$ <br> Mathematics $\geqslant 50 \%$ |
| 3 | 1 C | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) $)$ | Principles of <br> Accounts | Sci (Chem/Phy) | Nutrition \& Food <br> Science | Overall $\geqslant 60 \%$ <br> Mathematics $\geqslant 50 \%$ |
| 4 | 1 D | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Principles of <br> Accounts | Sci (Chem/Bio) | Art | Overall $\geqslant 60 \%$ <br> Mathematics $\geqslant 50 \%$ |
| 5 | 1 E | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Principles of <br> Accounts | Sci (Chem/Bio) | Design \& Technology | Overall $\geqslant 60 \%$ <br> Mathematics $\geqslant 50 \%$ |
| 6 | 1F | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Principles of <br> Accounts | Sci (Chem/Bio) | Nutrition \& Food <br> Science | Overall $\geqslant 60 \%$ <br> Mathematics $\geqslant 50 \%$ |


| 6-Subject Combinations |  |  |  |  |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- | :---: |
| S/No. | Code | 4th | 5th | 6th | Criteria |  |
| 7 | 2A | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Phy) | Art | Fror coursework subjects, <br> aptitude for the selected <br> subject and teachers <br> recommendation will be <br> considered |  |
| 8 | 2B | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Phy) | Design \& Technology |  |  |
| 9 | $2 C$ | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Phy) | Nutrition \& Food Science |  |  |
| 10 | 2 D | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Bio) | Art |  |  |
| 11 | 2 E | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Bio) | Design \& Technology |  |  |
| 12 | 2 F | Combined Humanities <br> (Social Studies + Geog/Hist/Lit) | Sci (Chem/Bio) | Nutrition \& Food Science |  |  |

[^0]Subject Options for Sec 3 Normal (Technical) Course

| 6-Subject Combinations |  |  |  |  |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- | :---: |
| S/No. | Code | 4th | 6th | Criteria |  |  |
| 1 | 1A | Computer Applications | Science | Mobile Robotics | Overall $\geqslant 60 \%$ |  |
| 2 | 1B | Computer Applications | Science | Design \& Technology | For coursework subjects, <br> aptitude for the selected <br> subject and teachers' <br> recommendation will be <br> considered |  |
| 3 | 1 C | Computer Applications | Science | Nutrition \& Food Science |  |  |

English Language, Mother Tongue Language \& Mathematics are 3 compulsory subjects

## Criteria to Offer Out-of-Stream Subjects

|  | Criteria to offer Out-of-Stream Subjects at Secondary 3 |  |
| :---: | :---: | :---: |
|  | at Express Level | at Normal (Academic) Level |
| Students who are taking SBB for the subject at the Express level | - Relevant Subject at Express Level $\geq 65 \%$ <br> - Overall Average $\geq 60 \%$ | - Not Applicable |
| Students who are not taking SBB for the subject at the Express level | - Relevant Subject at NA Level $\geq 75 \%$ <br> - Overall Average $\geq 65 \%$ <br> - Teachers' Recommendation on readiness to cope with subject at higher level | - Not Applicable |
| Students who are taking SBB for the subject at the NA Level | - Not Applicable | - Relevant Subject at NA Level $\geq 65 \%$ <br> - Overall Average $\geq 60 \%$ |

Note:
Subject Based Banding (SBB) - For Sec 1 \& 2 students who are deem able to cope with selected subjects at more demanding level

Out-of-Stream Subjects (OOS) - For upper secondary students to offer selected subjects at more demanding level.

## Subject Information



| Subject/ Subject Code/ Assessment |
| :--- |
| Physics (GCE O Level) [6091] |
| Component  Duration <br> Paper 1 (MCQ) Weightings  <br> Paper 2 <br>  <br> Free <br> Response) 1 h 45 m $50 \%$ <br> Paper 3 <br> (Practical) $1 \mathrm{~h} \mathrm{50m}$ $20 \%$ |

Chemistry (GCE O Level) [6092]

| Component | Duration | Weightings |
| :---: | :---: | :---: |
| Paper 1 (MCQ) | 1 h | $30 \%$ |
| Paper 2 <br>  <br> Free <br> Response) | 1 h 45 m | $50 \%$ |
| Paper 3 <br> (Practical) | 1 h 50 m | $20 \%$ |

Biology (GCE O Level) [6093]

| Component | Duration | Weightings |
| :---: | :---: | :---: |
| Paper 1 (MCQ) | 1 h | $30 \%$ |
| Paper 2 <br>  <br> Free <br> Response) | 1 h 45 m | $50 \%$ |
| Paper 3 <br> (Practical) | 1 h 50 m | $20 \%$ |

## Syllabus

Physics
The syllabus aims to provide a worthwhile educational experience for all students, whether or not they go on to study science beyond this level. It develops in students the understanding, and skills relevant to the practices of science, and enable them to appreciate practical applications of Physics in the real world, deepen their interest in Physics for future learning and work, become scientifically literate citizens who can innovate and seize opportunities in the 21st century, use the disciplinary ideas in Physics to approach, analyse and solve problems in the physical world. It also develop in students the values, ethics and attitudes relevant to science such as curiosity, creativity, integrity, objectivity, open-mindedness, resilience, responsibility and healthy skepticism.

## Chemistry

The syllabus aims to provide a worthwhile educational experience for all students, whether or not they go on to study science beyond this level. It develops in students the understanding and skills relevant to the practices of science, and enable them to appreciate practical applications of Chemistry in the real world, deepen their interest in Chemistry for future learning and work, become scientifically literate citizens who can innovate and seize opportunities in the 21st century, develop a way of thinking to approach, analyse and solve problems by explaining macroscopic characteristics and changes in chemical systems through the use of sub-microscopic and symbolic representations. It also develop in students the values, ethics and attitudes relevant to science such as curiosity, creativity, integrity, objectivity, open-mindedness, resilience, responsibility and healthy skepticism.

## Biology

The syllabus aims to provide a worthwhile educational experience for all students, whether or not they go on to study science beyond this level. It develop in students the understanding, and skills relevant to the practices of science, and enable them to appreciate practical applications of Biology in the real world, deepen their interest in Biology for future learning and work, become scientifically literate citizens who can innovate and seize opportunities in the 21st century and understand how living organisms work to sustain life and use the disciplinary ideas in Biology to approach, analyse and solve problems in biological systems. It also develop in students the values, ethics and attitudes relevant to science such as curiosity, creativity, integrity, objectivity, openmindedness, resilience, responsibility and healthy skepticism.

| Subject/ Subject Code/ Assessment |  |  | Syllabus |
| :---: | :---: | :---: | :---: |
| Science (Physics, Chemistry) (GCE O Level) [5086] Science (Chemistry, Biology) (GCE O Level) [5088] |  |  | Subject description for Physics, Chemistry and Biology is similar to that of the pure sciences. |
| Component | Duration | Weightings | Science (Physics, Chemistry), Syllabus 5086 <br> Paper 1 will be based on the Physics and Chemistry sections of the syllabus. <br> Paper 2 will be based on the Physics section of the syllabus. <br> Paper 3 will be based on the Chemistry section of the syllabus. <br> Paper 5 will be based on the Physics and Chemistry sections of the syllabus. <br> Science (Chemistry, Biology), Syllabus 5088 <br> Paper 1 will be based on the Chemistry and Biology sections of the syllabus. <br> Paper 3 will be based on the Chemistry section of the syllabus. <br> Paper 4 will be based on the Biology section of the syllabus. <br> Paper 5 will be based on the Chemistry and Biology sections of the syllabus. |
| Paper 1 (MCQ) | 1h | 20\% |  |
| Paper 2 Structured \& Free Response (Physics) | 1h 15m | 32.5\% |  |
| Paper 3 Structured \& Free Response (Chemistry) | 1h 15m | 32.5\% |  |
| Paper 4 Structured \& Free Response (Biology) | 1h 15m | 32.5\% |  |
| Paper 5 (Practical) | 1h 30m | 15\% |  |
| Science (Physics, Chemistry) (GCE NA Level) [5105] Science (Chemistry, Biology) (GCE NA Level) [5107] |  |  | Science (Physics, Chemistry), Syllabus 5105 <br> Papers 1, 2, 3, 4 <br> Science (Chemistry, Biology) Syllabus 5107 <br> Papers 3, 4, 5, 6 <br> The pair of Papers 1 and 2,3 and 4,5 and 6 will be taken in one session of 1 hour 15 minutes. |
| Component | Duration | Weightings |  |
| Paper 1 MCQ (Physics) | 1h 15m | 20\% |  |
| Paper 2 <br> Structured <br> (Physics) |  | 30\% |  |
| Paper 3 MCQ (Chemistry) | 1h 15m | 20\% |  |
| Paper 4 Structured (Chemistry) |  | 30\% |  |
| Paper 5 MCQ (Biology) | 1h 15m | 20\% |  |
| Paper 6 Structured (Biology) |  | 30\% |  |


| Subject/ Subject Code/ Assessment |
| :--- |

## Subject/ Subject Code/ Assessment

Design \& Technology (GCE O Level) [7059]

| Component | Duration | Weighting |
| :---: | :---: | :---: |
| Paper 1 <br> (Written <br> Exam) | 2 h | $40 \%$ |
| Paper 2 <br> (Design <br> Project) | weeks |  |

Design \& Technology (GCE NA Level) [7055]

| Component | Duration | Weighting |
| :---: | :---: | :---: |
| Paper 1 <br> (Written <br> Exam) | $1 \mathrm{~h} \mathrm{30m}$ | $40 \%$ |
| Paper 2 <br> (Design <br> Project) | 20 | weeks |

Design \& Technology (GCE NT Level) [7062]

| Component | Duration | Weighting |
| :---: | :---: | :---: |
| Paper 1 <br> (Written <br> Exam) | 1 h | $30 \%$ |
| Paper 2 <br> (Design <br> Project) | weeks | $70 \%$ |

Nutrition \& Food Science (GCE O Level) [6097]

| Component | Duration | Weighting |
| :---: | :---: | :---: |
| Paper 1 <br> (Written <br> Exam) | 2 h | $40 \%$ |
| Paper 2 <br> (Coursework) | 28 h <br> (Jan to Jul) | $60 \%$ |

Nutrition \& Food Science (GCE NA Level) [6073]

| Component | Duration | Weighting |
| :---: | :---: | :---: |
| Paper 1 <br> (Written <br> Exam) | $1 \mathrm{~h} \mathrm{30m}$ | $40 \%$ |
| Paper 2 <br> (Coursework) | 25 h <br> (Jan to Jul) | $60 \%$ |

Nutrition \& Food Science (GCE NT Level) [5979]

| Component | Duration | Weighting |
| :---: | :---: | :---: |
| Paper 1 <br> (Written <br> Exam) | 1 h 30 m | $40 \%$ |
| Paper 2 <br> (Coursework) | 35 h <br> (Jan to Jul) | $60 \%$ |

## Syllabus

The syllabus is designed to engage students in designing and prototyping ideas through applying technology. The students' learning leverages and builds on their experiences in design and technology, and emphasises on understanding everyday activities and creating possibilities to make life better. Through the design process, students cultivate creative, critical and reflective thinking to make sense of their learning and to develop related dispositions and skills using graphical means and technology.

The syllabus aims to engage students to

- Lead a healthier lifestyle proactively through proper diet and nutrition.
- Advocate sustainable food consumption by planning and making appropriate food choices.
- Apply principles of culinary science creatively in food preparation and cooking.

| Subject/ Subject Code/ Assessment |  |  | Syllabus |
| :---: | :---: | :---: | :---: |
| Art (GCE O Level) [6123] |  |  | The Art syllabus is designed to provide students with the opportunity to give form and meaning to their ideas, thoughts and feelings through visual and tactile forms. The breadth and depth of study cater to a range of abilities and interests. The process of art making involving the use of a variety of media and technologies, as well as its role in the development of critical and creative thinking, continue to be maintained. Visual literacy skills such as perceiving and responding to visual images, and analysis of visual information in its many forms are further enhanced and developed in this syllabus. This document presents the aims, the framework, the learning outcomes, the content and the examination requirements of the Art syllabus. |
| Component | Duration | Weighting |  |
| Paper 1 (Coursework) |  | 60\% |  |
| Paper 2 (Drawing \& Painting) | 3 h | 40\% |  |
| Paper 3 (study of Visual Arts) | $2 h$ |  |  |
| Choice <br> Art (G | either Paper | 2 or 3. $125]$ |  |
| Component | Duration | Weighting |  |
| Paper 1 (Coursework) |  | 60\% |  |
| Paper 2 (Drawing \& Painting) | 3 h | 40\% |  |
| Computer Applications (GCE NT Level) [7018] |  |  | Through the CPA curriculum, students learn a range of software application, how computer systems and networks work, and basic programming concepts. Students also gain awareness of the ethical, legal and security issues relating to the use of computers. |
| Component | Duration | Weighting |  |
| Paper 1 (Written) | 1h 15m | 30\% |  |
| Paper 2 (Practical) | 1h 30m | 35\% |  |
| Paper 3 (Practical) | 1h 30m | 35\% |  |
| Mobile Robotic (GCE NT Level) [A101] |  |  | The syllabus aims to provide students with the experience of developing their own mobile robots and at the same time provide a foundation to further their studies in mechatronics engineering or related fields. |
| Component | Duration | Weighting |  |
| Paper 1 (Written) | 1h | 30\% |  |
| Paper 2 <br> (Practical) | 1h 30m | 30\% |  |
| Paper 3 (Practical) | 2 h | 40\% |  |

For the latest information on the subjects, please check out the SEAB website.

## Aggregate Computation for admission to post-secondary institutions

* The aggregate computation for admission to junior college (JC), Millennia Institute (MI), polytechnic and Institute of Technical Education (ITE) courses are shown below.

|  | L1R5 : For JC Course |  |
| :---: | :---: | :---: |
| L1 | First Language | - English/Higher Mother Tongue |
| R5 | Relevant Subject 1 <br> Relevant Subject 2 Relevant Subject 3 <br> Relevant Subject 4 Relevant Subject 5 | - Humanities/Higher Art/Higher Music/Malay (Special Programme)/ <br> Chinese (Special Programme)/Bahasa Indonesia <br> - Mathematics/Science <br> - Humanities/Higher Art/Higher Music/Mathematics/ Science/ Malay (Special Programme)/Chinese (Special Programme)/ Bahasa Indonesia <br> - Any GCE O-Level subjects (except Religious Knowledge) <br> - Any GCE O-Level subjects (except Religious Knowledge) |


|  | L1R4 : For MI Course |  |
| :--- | :--- | :--- |
| L1 | First Language | - |
| English/Higher Mother Tongue |  |  |

## Subject Requirements for Admission to JC and MI

| Subject | Requirement |
| :---: | :---: |
| English Language | A1 to C6 |
| Mother Tongue Language*: |  |
| Chinese Language, Malay Language, Tamil Language | A1 to D7 |
| OR Higher Chinese Language, Higher Malay Language, Higher Tamil | A1 to E8 |
| Language |  |
| OR Chinese Language ' B ' Syllabus (CLB), Malay Language ' B ' Syllabus (MLB), Tamil Language 'B’ Syllabus (TLB) | Merit or Pass |
| Mathematics: |  |
| Mathematics | A1 to D7 |
| OR Additional Mathematics | A1 to D7 |


| Course Group |  | ELR2B2: For Polytechnic Courses |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Art \& Language-Related Courses | Business-Related Courses | Science \& Technology Courses | Design Courses |
| Aggr | ate Type | (ELR2B2-A) | (ELR2B2-B) | (ELR2B2-C) | (ELB2B2-D) |
| EL |  | English |  |  |  |
| R2 | $1^{\text {st }}$ Group of Relevant Subjects | Art <br> Geography <br> Humanities (Social Studies, <br> Literature in English) <br> Humanities (Social Studies, <br> History) <br> Humanities (Social Studies, <br> Geography) <br> Music | Elementary Mathematics Additional Mathematics |  |  |
|  | $2^{\text {nd }}$ Group of Relevant Subjects | Additional Mathematics <br> Art <br> HMTL/MTL <br> Design \& Technology <br> Elementary Mathematics <br> Geography <br> Humanities (Social Studies, <br> Literature in English) <br> Humanities (Social Studies, <br> History) <br> Humanities (Social Studies, <br> Geography) <br> Mother Tongue Language <br> Music <br> Nutrition \& Food Science <br> Principles of Accounts | Art <br> Geography <br> Humanities (Social <br> Studies, Literature in <br> English) <br> Humanities (Social <br> Studies, History) <br> Humanities (Social <br> Studies, Geography) <br> Music <br> Principles of Accounts | Biology <br> Chemistry <br> Design \& Technology <br> Nutrition \& Food Science <br> Physics <br> Science (Chem, Bio) <br> Science (Phy, Chem) | Art <br> Biology <br> Chemistry <br> Design \& Technology <br> Nutrition \& Food Science <br> Physics <br> Science (Chem, Bio) <br> Science (Phy, Chem) |
|  | B2 | Best 2 other subjects |  |  |  |


|  | ELB4, ELR1B3 \& ELR2B2: For ITE Higher Nitec Course |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course Group | Early Childhood/ Beauty \& Spa/ Leisure \& Travel/ Hospitality Course | Business Courses |  | Chemical \& Life Sciences/ Engineering/ Information Technology Courses |  |  |
| Aggregate | ELB4-A |  | ELR1B3-B | ELR2B2-C |  |  |
| EL | English |  |  |  |  |  |
| B4 | Best 4 other subjects, excluding CCA | R1 | Elementary Mathematics Additional Mathematics Principles of Accounts | R2 | $1^{\text {st }}$ Group of Relevant Subjects | Elementary Mathematics Additional Mathematics |
|  |  | B3 | Best 3 other subjects, excluding CCA |  | $2^{\text {nd }}$ Group of Relevant Subjects | Biology <br> Chemistry <br> Design \& Technology <br> Physics <br> Science (Chem, Bio) <br> Science (Phy, Chem) |
|  |  |  |  |  | B2 | Best 2 other subjects, excluding CCA |

## Useful Information on admission to post-secondary institutions

|  |  |  | rts |  | ce/lB |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S/No | JC Name | Course Code | $\begin{gathered} \text { Previous } \\ \text { (2022) JAE } \\ \text { Net L1R5 } \\ \hline \end{gathered}$ | Course Code | $\begin{gathered} \text { Previous } \\ \text { (2022) JAE } \\ \text { Net L1R5 } \\ \hline \end{gathered}$ |
| 1 | Anderson Serangoon Junior College | 39A | 11 | 39S | 10 |
| 2 | Anglo-Chinese Junior College | 22A | 9 | 22 S | 8 |
| 3 | Anglo-Chinese School (Independent) | - | - | 511 | 5 |
| 4 | Catholic Junior College | 23A | 13 | 23 S | 13 |
| 5 | Dunman High School | 44A | 9 | 44 S | 8 |
| 6 | Eunoia Junior College | 38A | 8 | 38 S | 6 |
| 7 | Hwa Chong Institution | 24A | 5 | 24 S | 4 |
| 8 | Jurong Pioneer Junior College | 40A | 16 | 40S | 14 |
| 9 | Nanyang Junior College | 26A | 6 | 26S | 5 |
| 10 | National Junior College | 27A | 8 | 27S | 7 |
| 11 | Raffles Institution | 28A | 5 | 28 S | 4 |
| 12 | River Valley High School | 45A | 9 | 45 S | 8 |
| 13 | St. Andrew's Junior College | 30A | 11 | 30 S | 9 |
| 14 | St. Joseph's Institution | - | - | 521 | 7 |
| 15 | Tampines Meridian Junior College | 41A | 13 | 41 S | 13 |
| 16 | Temasek Junior College | 32A | 9 | 32 S | 8 |
| 17 | Victoria Junior College | 33A | 8 | 33 S | 7 |
| 18 | Yishun Innova Junior College | 42A | 19 | 42 S | 19 |

For admission info on planned intakes and ELR2B2 range for 2023 intake to courses at the various polytechnics, please check out the links below

| Nanyang Polytechnic | https://www.nyp.edu.sg/content/dam/nyp/admissions/full-time-- <br> diploma/admission-exercise/intake-and-jae-elr2b2-points/intake-and-elr2b2.pdf |
| :--- | :--- |
| Singapore Polytechnic | Course Intake and JAE ELR2B2 Range (sp.edu.sg) |
| Temasek Polytechnic | https://www.tp.edu.sg/admissions-and-finance/course-intake-aggregate-range.html |
| Ngee Ann Polytechnic | https://www.np.edu.sg/admissions-enrolment/guide-for-prospective- <br> students/elr2b2 |
| Republic Polytechnic | https://www.rp.edu.sg/schools-courses/courses/full-time-diplomas/full-time- <br> diplomas-by-interest-areas-elr2b2 |

For admission to full-time 3-year Higher Nitec/2 Year Nitec courses, please refer to the link https://www.ite.edu.sg/docs/default-source/admissions-docs/full-time/entry-requirements/jien/jien-2023-intake-entry-requirements.pdf?sfursn=29ec6203 2

## Frequently Asked Questions

Question: Does my child need to pass English Language to go to junior colleges?
Answer: Yes, a minimum of C6 for EL is required for admission to JCs.

Question: Will offering Combined Science affect the chance of child going to the junior college?
Answer: It will not affect your child's chance of going to the junior college as admission is solely based on L1R5 aggregate score. However do note that different JCs have slightly different subject prerequisites for choice of subjects.

Question: My child is keen on pursuing a life-science related course in the polytechnic? Is Biology a requirement?
Answer: It is not a requirement to study Biology in order to pursue the life-science course in the polytechnic. Any science subject will do.

Question: Is triple science a requirement if my child is interested to study Medicine in the future?
Answer: It is not a requirement to offer triple science. In fact, the compulsory subject for admission to the Faculty of Medicine at the local university is Chemistry.

Question: What is the minimum number of students to start a class for a subject?
Answer: In general, a class will be opened if a minimum of 10 eligible students opted for the combination

Question: Can a student change their subject combination in the middle of Sec 3?
Answer: Any request for changes to subject combination will NOT be considered before the end of Secondary 3 as students need time to adapt to and cope with the learning of the given subject combination at the upper secondary level.

Question: Can my child still choose a subject combination with Pure Sciences if he did not meet the subject criteria?
Answer: Your child can still opt for the subject combination but the chance of getting the option is lower than those who met the criteria.

Question: If my child is unsuccessful in getting the first choice subject option, will it affect the chance of getting the second choice subject option?
Answer: $\quad$ Subject option allocation is based on merit and hence it will not affect the chance of getting the second choice option if the child is unsuccessful with the first choice subject option.

Question: My child is weak in some of the subjects. Will this affect the chance of getting the preferred choice of subject options?
Answer: The subject option exercise is based primarily on merits, which is the overall performance across all subjects as well as subject-specific criteria for some subjects. These considerations provide an indication on the child's readiness to cope with the rigour of the learning at the upper secondary levels.

Question: Can CCA points be used for admission to JC?
Answer: CCA may be used a bonus point for admission to JC only if they are eligible for JC admission, i.e. attaining L1R5 $\leq 20$.


[^0]:    English Language, Mother Tongue Language \& Mathematics are 3 compulsory subjects

