The Y.W.C.A. Hioe Tjo Yoeng College

New Senior Secondary (NSS) Curriculum

2017 - 2020

Academic and Curricular Affairs Committee,

HTYC

March 2017
Plan for New Senior Secondary (NSS) Education in HTYC

Core Subjects

English 4
Chinese 6
Mathematics 8
Liberal Studies (LS) 10

Elective Subjects

Science Education
- Biology 12
- Chemistry 14
- Physics 16

Technology Education
- Business, Accounting and Financial Studies (BAFS) 18
- Information and Communication Technology (ICT) 20

Personal, Social & Humanities Education
- Chinese History 22
- History 23
- Economics 24
- Geography 26

This guide book introduces the updated curricula of the four CORE subjects and nine ELECTIVE subjects offered to current HTYC students in New Senior Secondary (NSS) Education. For further information, students and parents can refer to the NSS webpage of the Education Bureau (EDB):

Dr. Chow Wong Kui
(Vice-principal, Academic and Curricular Affairs)
Mar 2017
Plan for New Senior Secondary Education in HTYC

As an EMI school, and with student intakes having good potential and capacity, HTYC has a firm direction in offering an education which enables students to pursue university studies. Therefore, the new senior secondary (NSS) curriculum, while enlarging the scope of knowledge and skills for students, crucially hinges on the maximization of students’ competitive edge for university admission.

Subject Combinations for NSS 2017-2020
- The subject combinations and groupings are structured to fit the interests and preferences of students based on data from twelve student surveys conducted in 2006-2017. Students are given a large number of choices in elective subjects.
- The basic structure is 4 core subjects + 2 to 3 electives (from 9 subjects offered).
- Mathematics Module 2 can be chosen from all students who has taken 2 or 3 electives.

<table>
<thead>
<tr>
<th>Classes</th>
<th>S.4A</th>
<th>S.4B</th>
<th>S.4C</th>
<th>S.4D</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Core Subjects</td>
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<td></td>
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</tr>
<tr>
<td>English</td>
<td>English</td>
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<tr>
<td>Chinese</td>
<td>Chinese</td>
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<tr>
<td>LS</td>
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<tr>
<td>Math</td>
<td>Math + M2 *</td>
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<tr>
<td>Math + M2 *</td>
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<tr>
<td>Physics</td>
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<tr>
<td>Chemistry</td>
<td>Chem</td>
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<tr>
<td>Biology</td>
<td>Bio</td>
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</tr>
<tr>
<td>History</td>
<td>His</td>
<td></td>
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<tr>
<td>Chinese History</td>
<td>C His</td>
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<tr>
<td>ICT</td>
<td>ICT</td>
<td></td>
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</tr>
<tr>
<td>Geography</td>
<td>Geo</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Economics</td>
<td>Eco</td>
<td></td>
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</tr>
<tr>
<td>BAFS</td>
<td>BAFS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>Religious Studies (Christianity), Physical Education, Music, LWL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LS = Liberal Studies; LWL = life-wide learning
ICT = Information and Communication Technology
BAFS = Business Accounting and Financial Studies
* Mathematics Module 2 lessons are conducted after school
** 2 classes of Biology, Chemistry, Economics and ICT will be offered and the other elective subjects will have one class in 2017-18.

Foundation in Junior Secondary Education
Students are to build up a strong foundation of language proficiency and generic skills in S.1-3 through language trainings in Chinese, English and Putonghua, Issues Enquiry, Project Learning Scheme and Reading-to-learn Scheme, etc. Students are also to build up career awareness and perspectives through career-related projects and further studies and career guidance.
The Y.W.C.A. Hioe Tjo Yoeng College  
Senior Secondary Curriculum  
**English**

**Part 1: Curriculum framework and time allocation**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Compulsory Part</td>
<td>75% (281 hours)</td>
</tr>
<tr>
<td>Elective Part</td>
<td>25% (94 hours)</td>
</tr>
</tbody>
</table>

Total lesson time: approximately 375 hours for S4 to S6

**Part 2: Curriculum**

*The Compulsory Part*

In the Compulsory Part, we will continue with what we do at junior secondary level, i.e. delivering the learning content by way of the task-based approach to language learning. The learning and teaching of the four language skills, grammar, communicative functions, vocabulary and text-types will be emphasised.

Themes and concepts are explored through tasks. Different resources and authentic materials will be used to suit the interests, needs and abilities of our students. With these, students will be able to have a framework that enables them to learn in purposeful and authentic situations. Cross-curricular topics will also be covered.

*The Elective Part*

The Elective Part includes a range of extension modules which reinforce different aspects of English Language learning. The Elective Part takes up about 25% (approximately 100 hours) of lesson time. It serves the purposes of adding variety to the English Language curriculum, broadening students’ learning experience and catering for their diverse needs and interests.

Task-based approach and learner-centred instruction will be adopted in the teaching of the Elective Part so as to provide more opportunities for meaningful and purposeful communication and promoting integrative and creative uses of language.

The proposed modules to be offered in our school are:

**Language Arts**
- Learning English through Poems and Songs
- Learning English through Popular Culture

**Non-Language Arts**
- Learning English through Social Issues
The modules in the Elective Part represent a structured and focussed way of using various approaches to learning English over a sustained period of time. They focus not so much on the explicit teaching of subject knowledge and skills (i.e. the four skills, grammar, communicative functions, vocabulary and text-types) as on providing students with opportunities to apply them through following a particular approach or exploring a particular topic which may or may not be covered in the Compulsory Part. In addition to developing students’ language skills, the modules enhance the further development of generic skills such as communication, critical thinking, creativity and collaboration.

For each module, students will be engaged in a variety of activities to develop their language skills, generic skills and cultural awareness, and to help them gain understanding and knowledge of the topic in focus. They will also be provided with opportunities to demonstrate their learning or achievements through producing some kind of verbal or written output. Depending on the nature of the modules, this may be in the form of a performance, a display or a portfolio consisting of learners’ work and reflections.

<table>
<thead>
<tr>
<th>Component</th>
<th>Outline</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public examination</td>
<td>Paper 1 Reading</td>
<td>20%</td>
<td>1½ hours</td>
</tr>
<tr>
<td></td>
<td>Paper 2 Writing</td>
<td>25%</td>
<td>2 hours</td>
</tr>
<tr>
<td></td>
<td>Paper 3 Listening and Integrated Skills</td>
<td>30%</td>
<td>About 2 hours</td>
</tr>
<tr>
<td></td>
<td>Paper 4 Speaking</td>
<td>10%</td>
<td>About 20 minutes</td>
</tr>
<tr>
<td>School based Assessment</td>
<td>(for school candidates only)</td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>

Part 3: Assessment
基督教女青年會丘佐榮中學
新高中課程
中國語文科

甲部：課程架構及課時分配

<table>
<thead>
<tr>
<th>項目</th>
<th>比重</th>
<th>時間</th>
</tr>
</thead>
<tbody>
<tr>
<td>必修部份</td>
<td>83%</td>
<td>(262 小時)</td>
</tr>
<tr>
<td>選修部份</td>
<td>17%</td>
<td>(52 小時)</td>
</tr>
</tbody>
</table>

乙部：課程內容

必修部份

中國語文科必修部分的學習內容涵蓋閱讀、寫作、聆聽、說話、文學、中華文化、品德情意、思維和語文自學九個學習範疇。本科課程特別著重：
1. 讀寫聽說能力、思維能力、審美能力和自學能力；
2. 語文學習的興趣、態度和習慣；
3. 文學、文化素養和品德情意；
4. 對家庭、國家和世界的責任意識。

選修部份

教育局中國語文科選修部分共設十個單元，包括：
1. 名著及改編影視作品
2. 戲劇工作坊
3. 小說與文化
4. 文化專題探討
5. 新聞與報道
6. 多媒體與應用寫作
7. 翻譯作品選讀
8. 科普作品選讀
9. 普通話傳意和應用
10. 普通話與表演藝術

本校預備開設的選修單元，包括新聞與報道及文化專題探討。(本科每年開設的選修單元會因應當年的情況再作修訂。)

丙部：評估方式 / 評估設計

公開考試

本科公開考試共分四個部分：

<table>
<thead>
<tr>
<th></th>
<th>比重</th>
<th>評核形式</th>
<th>考試時間</th>
</tr>
</thead>
<tbody>
<tr>
<td>卷一 閱讀能力</td>
<td>24%</td>
<td>筆試</td>
<td>1 小時 30 分鐘</td>
</tr>
<tr>
<td>卷二 寫作能力</td>
<td>24%</td>
<td>筆試</td>
<td>1 小時 30 分鐘</td>
</tr>
<tr>
<td>卷三 聆聽及綜合能力</td>
<td>18%</td>
<td>筆試</td>
<td>約 1 小時 30 分鐘</td>
</tr>
<tr>
<td>卷四 說話能力</td>
<td>14%</td>
<td>口語溝通</td>
<td>25 分鐘</td>
</tr>
</tbody>
</table>
校本評核

本科校本評核包括兩大部分：

<table>
<thead>
<tr>
<th>內容</th>
<th>比重</th>
<th>評核形式</th>
</tr>
</thead>
<tbody>
<tr>
<td>必修部分：閱讀活動</td>
<td>6%</td>
<td>呈交 1 個分數： 閱讀活動 1 個分數</td>
</tr>
<tr>
<td>選修部分</td>
<td></td>
<td></td>
</tr>
<tr>
<td>日常學習表現</td>
<td>14%</td>
<td>學生共修讀兩個選修單元</td>
</tr>
<tr>
<td>單元終結表現</td>
<td></td>
<td>每個單元呈交 1 個分數</td>
</tr>
<tr>
<td></td>
<td></td>
<td>選修部分合共呈交 2 個分數</td>
</tr>
</tbody>
</table>
The Y.W.C.A. Hioe Tjo Yoeng College
Senior Secondary Curriculum
Mathematics

Part 1: Curriculum framework and time allocation

<table>
<thead>
<tr>
<th></th>
<th>Total lesson time (approximate number of hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory Part</td>
<td>10% – 12.5% (250 hours – 313 hours)</td>
</tr>
<tr>
<td>Compulsory Part with a module</td>
<td>15% (375 hours)</td>
</tr>
</tbody>
</table>

Part 2: Curriculum

*Compulsory Part:*

1. Quadratics equations in one unknown
2. Functions and graphs
3. Exponential and logarithmic functions
4. More about polynomials
5. More about equations
6. Variations
7. Arithmetic and geometric sequences and their summations
8. Inequalities and linear programming
9. More about graphs of functions
10. Basic properties of circles
11. Locus
12. Equations of straight lines and circles
13. More about trigonometry
14. Permutation and combination
15. More about probability
16. Measures of dispersion
17. Uses and abuses of statistics
18. Further applications
19. Inquiry and investigation

*Extended Part:*

**Module 2 (Algebra and Calculus)**

1. Surds
2. Mathematical induction
3. Binomial theorem
4. More about trigonometric functions
5. Introduction to the number $e$
6. Limits
7. Differentiation
8. Applications of differentiation
9. Indefinite integration
10. Definite integration
11. Applications of definite integration
12. Determinants
13. Matrices
14. System of linear equations
15. Introduction to vectors
16. Scalar product and vector product
17. Applications of vectors
18. Inquiry and investigation
Part 3: Assessment

**Compulsory Part**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public examination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper 1</td>
<td>65%</td>
<td>2.25 hours</td>
</tr>
<tr>
<td>Paper 2</td>
<td>35%</td>
<td>1.25 hours</td>
</tr>
<tr>
<td>Conventional questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple-choice questions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Module 2 (Algebra and Calculus)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public examination</td>
<td>100%</td>
<td>2.5 hours</td>
</tr>
</tbody>
</table>
Part 1: Curriculum framework and time allocation

<table>
<thead>
<tr>
<th>Public Examination:</th>
<th>School-based Assessment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Areas of Study</td>
<td>Independent Enquiry Study (IES)</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>67% (168 hours)</td>
<td>33% (82 hours)</td>
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</tbody>
</table>

Total lesson time: 250 hours for S4 to S6

Part 2: Curriculum

*Public Examination – Three Areas of Study*

I. **Area of Study: Self and Personal Development**
   1. Module 1: Personal Development and Interpersonal Relationships
      1. Theme 1: Understanding oneself
      2. Theme 2: Interpersonal relationships

II. **Area of Study: Society and Culture**
   1. Module 2: Hong Kong Today
      1. Theme 1: Quality of life
      2. Theme 2: Rule of law and socio-political participation
      3. Theme 3: Identity
   2. Module 3: Modern China
      1. Theme 1: China’s reform and opening up
      2. Theme 2: Chinese culture and modern life
   3. Module 4: Globalization
      1. Theme 1: Impact of globalization and related responses

III. **Area of Study: Science, Technology and the Environment**
   1. Module 5: Public Health
      1. Theme 1: Understanding of public health
      2. Theme 2: Science, technology and public health
   2. Module 6: Energy Technology and the Environment
      1. Theme 1: The influences of energy technology
      2. Theme 2: The environment and sustainable development

*School-based Assessment – Independent Enquiry Study (IES)*
## Part 3: Assessment

<table>
<thead>
<tr>
<th>Component</th>
<th>Outline</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public examination</td>
<td>Paper 1 Data-response Questions</td>
<td>50%</td>
<td>2 hours</td>
</tr>
<tr>
<td></td>
<td>Paper 2 Extended-response Questions</td>
<td>30%</td>
<td>1 hour and 15 minutes</td>
</tr>
<tr>
<td>School-based Assessment (SBA*)</td>
<td>Independent Enquiry Study (IES)</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

* **SBA**

In the context of public assessment, **SBA** refers to assessments administered in schools and marked by the students’ own teachers.

**IES** is adopted as the mode of SBA in LS. In itself, it is a learning experience encouraging students to take up the major responsibility of learning under their teacher’s supervision so that students will be independent and self-directed learners through the enquiry process. Students have to compile an IES Report on a contemporary issue by adopting the structured enquiry approach.
The Y.W.C.A. Hioe Tjo Yoeng College
Senior Secondary Curriculum

**Biology**

**Part 1: Curriculum framework and time allocation**

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<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Compulsory Part</td>
<td>72% (180 hours)</td>
</tr>
<tr>
<td>Elective Part</td>
<td>20% (50 hours)</td>
</tr>
<tr>
<td>Investigatory Studies</td>
<td>8% (20 hours)</td>
</tr>
</tbody>
</table>

Total lesson time: 250 hours for S4 to S6

**Part 2: Curriculum**

*Compulsory Part:* - both core and extended components will be covered in the curriculum

<table>
<thead>
<tr>
<th>I. Cells and Molecules of Life</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Molecules of life</td>
<td></td>
</tr>
<tr>
<td>b. Cellular organization</td>
<td></td>
</tr>
<tr>
<td>c. Movement of substances across membrane</td>
<td></td>
</tr>
<tr>
<td>d. Cell cycle and division</td>
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</tr>
<tr>
<td>e. Cellular energetics</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Genetics and Evolution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Basic genetics</td>
<td></td>
</tr>
<tr>
<td>b. Molecular genetics</td>
<td></td>
</tr>
<tr>
<td>c. Biodiversity and evolution</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Organisms and Environment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Essential life processes in plants</td>
<td></td>
</tr>
<tr>
<td>b. Essential life processes in animals</td>
<td></td>
</tr>
<tr>
<td>c. Reproduction, growth and development</td>
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<tr>
<td>d. Coordination and response</td>
<td></td>
</tr>
<tr>
<td>e. Homeostasis</td>
<td></td>
</tr>
<tr>
<td>f. Ecosystems</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. Health and Diseases</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Personal health</td>
<td></td>
</tr>
<tr>
<td>b. Diseases</td>
<td></td>
</tr>
<tr>
<td>c. Body defence mechanisms</td>
<td></td>
</tr>
</tbody>
</table>

*Elective Part* – the following electives have been selected:

<table>
<thead>
<tr>
<th>V. Human Physiology: Regulation and Control</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Regulation of water content (osmoregulation)</td>
<td></td>
</tr>
<tr>
<td>b. Regulation of body temperature</td>
<td></td>
</tr>
<tr>
<td>c. Regulation of gas content in blood</td>
<td></td>
</tr>
<tr>
<td>d. Hormonal control of reproductive cycle</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VI. Biotechnology</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Techniques in Modern Biotechnology</td>
<td></td>
</tr>
<tr>
<td>b. Applications in Biotechnology</td>
<td></td>
</tr>
<tr>
<td>c. Bioethics</td>
<td></td>
</tr>
</tbody>
</table>
**Investigatory Study:**

Scientific inquiry is one of the curriculum emphases which recur throughout the curriculum. It is expected that students will further develop skills in planning and conducting investigations, communicating information and understanding, scientific thinking and problem-solving as well as working individually and in teams. In addition to practical work in lesson time, there are 20 hours allocated for arranging relatively large-scale or cross-topic investigations. This provides students with opportunities to develop the full range of skills and appreciate the nature of science when they conduct individual or group investigative projects.

**Part 3: Assessment**

<table>
<thead>
<tr>
<th>Component</th>
<th>Outline</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public examination</td>
<td>Paper 1 Compulsory Part</td>
<td>60%</td>
<td>2.5 hours</td>
</tr>
<tr>
<td></td>
<td>Paper 2 Elective Part</td>
<td>20%</td>
<td>1 hour</td>
</tr>
<tr>
<td>School-based assessment (SBA)</td>
<td>Practical related tasks</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

**Practical related tasks:**

Students are required to perform a stipulated number of pieces of practical work. The practical work should be integrated closely with the curriculum content and form a part of the normal learning and teaching process. In investigative work, students are required to: design and perform investigations; present, interpret and discuss their findings; and draw appropriate conclusions. They are expected to make use of their knowledge and understanding of biology in performing these tasks, through which their practical, process and generic skills will be developed and assessed.
Part 1: Curriculum framework and time allocation

<table>
<thead>
<tr>
<th>Level</th>
<th>Compulsory Part</th>
<th>Elective Part</th>
<th>SBA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72.8% (182 hours)</td>
<td>19.2% (48 hours)</td>
<td>8.0% (20 hours)</td>
</tr>
</tbody>
</table>

Total lesson time: 250 hours for S4 to S6

Part 2: Curriculum

Compulsory Part - both core and extended components will be covered in the curriculum

I. Planet Earth
   a. The atmosphere
   b. The ocean
   c. Rocks and minerals

II. Microscopic World I
   a. Atomic structure
   b. The Periodic Table
   c. Metallic bonding
   d. Structures and properties of metals
   e. Ionic and covalent bond
   f. Structures and properties of giant ionic substances
   g. Structures and properties of simple molecular substances
   h. Structures and properties of giant covalent substances
   i. Comparison of structures and properties of importance types of substances

III. Metals
   a. Occurrence and extraction of metals
   b. Reactivity of metals
   c. Reacting masses
   d. Corrosion of metals and their protection

IV. Acids and Bases
   a. Introduction to acids and alkalies
   b. Indicators and pH
   c. Strength of acids and alkalies
   d. Salts and neutralization
   e. Concentration of solutions
   f. Volumetric analysis involving acids and alkalies

V. Fossil Fuels and Carbon Compounds
   a. Hydrocarbons from fossil fuels
   b. Homologous series, structural formulae and naming of carbon compounds
   c. Alkanes and alkenes
   d. Addition polymers

VI. Microscopic World II
   a. Polarity of bond and molecule
   b. Intermolecular forces
   c. Structures and properties of molecular crystals
   d. Simple molecular substances with non-octet structures
   e. Shapes of simple molecules

VII. Redox Reactions, Chemical Cells and Electrolysis
   a. Chemical cells in daily life
   b. Reactions in simple chemical cells
   c. Redox reactions
   d. Redox reactions in chemical cells
   e. Electrolysis

VIII. Chemical Reactions and Energy
   a. Energy changes in chemical reactions
   b. Standard enthalpy change of reactions
   c. Hess’s law

IX. Rate of Reaction
   a. Rate of chemical reaction
   b. Factors affecting rate of reaction
   c. Molar volume of gases at room temperature and pressure

X. Chemical Equilibrium
   a. Dynamic equilibrium
   b. Equilibrium constant
   c. The effect of changes in concentration

XI. Chemistry of Carbon Compounds
   a. Introduction to selected homologous series
   b. Isomerism
   c. Typical reactions of various functional groups
   d. Inter-conversions of carbon compounds
   e. Importance organic substances

XII. Patterns in the Chemical World
   a. Periodic variation in physical properties of elements form Li to Ar
   b. Bonding, stoichiometric composition and acid-base properties of the oxides of elements from Na to Cl
   c. General properties of transition metals
Elective Part - the following electives have been selected:

<table>
<thead>
<tr>
<th>XIII. Industrial Chemistry</th>
<th>XV. Analytical Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Importance of industrial processes</td>
<td>a. Detecting the presence of chemical species</td>
</tr>
<tr>
<td>b. Rate equation</td>
<td>b. Separation and purification methods</td>
</tr>
<tr>
<td>c. Activation energy</td>
<td>c. Quantitative methods of analysis</td>
</tr>
<tr>
<td>d. Catalysis and industrial processes</td>
<td>d. Instrumental analytical methods</td>
</tr>
<tr>
<td></td>
<td>e. Contribution of analytical chemistry to our society</td>
</tr>
</tbody>
</table>

Part 3: Assessment

<table>
<thead>
<tr>
<th>Component</th>
<th>Outline</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public examination</td>
<td>Paper 1 Compulsory Part</td>
<td>60%</td>
<td>2½ hrs</td>
</tr>
<tr>
<td></td>
<td>Paper 2 Elective Part</td>
<td>20%</td>
<td>1 hr</td>
</tr>
<tr>
<td>School based assessment (SBA)</td>
<td>Practical related tasks</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

**Practical related tasks:**

Students are required to perform a stipulated number of pieces of practical work, which may include designing experiments, and reporting and interpreting the results. The work should be integrated closely with the curriculum content and form a part of the normal learning and teaching process.
The Y.W.C.A. Hioe Tjo Yoeng College
Senior Secondary Curriculum

Physics

Part 1: Curriculum framework and time allocation

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory Part</td>
<td>74% (184 hours)</td>
</tr>
<tr>
<td>Elective Part</td>
<td>20% (50 hours)</td>
</tr>
<tr>
<td>SBA</td>
<td>6% (16 hours)</td>
</tr>
</tbody>
</table>

Total lesson time: 250 hours for S4 to S6

Part 2: Curriculum

Compulsory Part - both core and extended components will be covered in the curriculum

I. Heat and Gases
   a. Temperature, heat and internal energy
   b. Transfer processes
   c. Change of state
   d. Gases

II. Force and Motion
    a. Position and movement
    b. Force and motion
    c. Projectile motion
    d. Work, energy and power
    e. Momentum
    f. Uniform circular motion
    g. Gravitation

III. Wave Motion
     a. Nature and properties of waves
     b. Light
     c. Sound

IV. Electricity and Magnetism
    a. Electrostatics
    b. Circuits and domestic electricity
    c. Electromagnetism

V. Radioactivity and Nuclear Energy
   a. Radiation and radioactivity
   b. Atomic model
   c. Nuclear energy

Elective Part
The following electives have been selected:

VI. Atomic World
    a. Rutherford’s atomic model
    b. Photoelectric effect
    c. Bohr’s atomic model of hydrogen
    d. Particles or waves
    e. Probing into nano scale

VII. Energy and Use of Energy
     a. Electricity at home
     b. Energy efficiency in building and transportation
     c. Renewable and nonrenewable energy sources
Part 3: Assessment

<table>
<thead>
<tr>
<th>Component</th>
<th>Outline</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public examination</td>
<td>Paper 1 Compulsory Part</td>
<td>60%</td>
<td>2½ hrs</td>
</tr>
<tr>
<td></td>
<td>Paper 2 Elective Part</td>
<td>20%</td>
<td>1 hr</td>
</tr>
<tr>
<td>School based assessment (SBA)</td>
<td>Practical related tasks</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

**Practical related tasks** here refer to laboratory work or investigative study in Physics. In S5 and S6, students’ performance in practical work and reporting of practical work will be assessed. Details of these practical-related abilities are as follows:
(a) to organize and perform practical work, including the use of suitable apparatus and equipment, and the appropriate manipulative skills in carrying out the work;
(b) to make accurate observations and measurements;
(c) to record and to present results in an appropriate form;
(d) to interpret and discuss results, and to draw appropriate conclusions.
The Y.W.C.A. Hioe Tjo Yoeng College
Senior Secondary Curriculum

Business, Accounting and Financial Studies (BAFS)

Part 1: Curriculum framework and time allocation

<table>
<thead>
<tr>
<th>Compulsory Part</th>
<th>40% (100 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective Part</td>
<td>60% (150 hours)</td>
</tr>
</tbody>
</table>

Total lesson time: 250 hours for S4 to S6

Part 2: Curriculum

**Compulsory Part** - both core and extended components will be covered.

I. Business Environment
   a. Hong Kong Business Environment
   b. Forms of Business Ownership
   c. Business Ethics and Social Responsibilities

II. Introduction to Management
   a. Management Functions
   b. Key Business Functions
   c. Small and Medium Enterprises (SMEs)

III. Introduction to Accounting
   a. Purposes and Role of Accounting
   b. The Accounting Cycle
   c. Uses of Financial Statements
   d. Accounting Assumptions, Principles and Conventions
   e. Basic Ratio Analysis

IV. Basics of Personal Financial Management
   a. Time value of Money
   b. Consumer Credit
   c. Personal Financial Planning and Investments
   d. Stock Trading as an Investment

**Elective Part**

The following elective has been selected:

**Accounting Module**

V. Financial Accounting
   a. Books of Original Entry and Types of Ledgers
   b. Period-end Adjustments Relating to the Preparation of Financial Statements
   c. Financial Reporting for Different Forms of Business Ownership
   d. Control Systems
   e. Generally Accepted Accounting Principles
   f. Financial Analysis
   g. Incomplete Records

VI. Cost Accounting
   a. Cost Classification, Concepts and Terminology
   b. Marginal and Absorption Costing
   c. Cost Accounting for Decision-making
### Part 3: Assessment

<table>
<thead>
<tr>
<th>Component</th>
<th>Part</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public examination</td>
<td>Paper 1 Compulsory part</td>
<td>40%</td>
<td>1 hour 15 mins</td>
</tr>
<tr>
<td></td>
<td>Paper 2</td>
<td>60%</td>
<td>2 hours 15 mins</td>
</tr>
<tr>
<td></td>
<td>2A Accounting module</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part 1: Curriculum framework and time allocation

<table>
<thead>
<tr>
<th>Part</th>
<th>Percentage</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory Part</td>
<td>61%</td>
<td>145</td>
</tr>
<tr>
<td>Elective Part</td>
<td>28%</td>
<td>75</td>
</tr>
<tr>
<td>School Based Assessment</td>
<td>12%</td>
<td>30</td>
</tr>
</tbody>
</table>

Part 2: Curriculum (content, modules, others)

Compulsory Part:

A. Information Processing
   a. Introduction to Information Processing
   b. Data Organisation and Data Control
   c. Data Representation
   d. The Use of Office Automation Software
   e. Presentation of Information

B. Computer System Fundamentals
   a. Basic Machine Organisation
   b. System Software
   c. Computer Systems

C. Internet and its Applications
   a. The Networking and Internet Basic
   b. Internet Services and Applications
   c. Elementary Web Authoring

D. Basic Programming Concepts
   a. Problem-Solving Procedures
   b. Algorithm Design
   c. Algorithm Testing

E. Social Implications
   a. Equity of Access
   b. Work and Health Issues
   c. Intellectual Property
   d. Threats and Security on the Internet

Elective Part

Software Development
   a. Programming
   b. Programming Languages
   c. Systems Development
School Based Assessment

Students are required to complete two guided tasks focusing on ‘Design and Implementation’ and ‘Testing and Evaluation’ in the development of an information system. The context of the guided tasks is related to both the Compulsory Part and the Elective Part chosen by individual students.

Part 3: Assessment

Public Examination (design / components / weightings / durations / etc.)

<table>
<thead>
<tr>
<th>Component</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper 1 Compulsory Part</td>
<td>55%</td>
<td>2 hours</td>
</tr>
<tr>
<td>Paper 2 Elective Part</td>
<td>25%</td>
<td>1 hour 30 minutes</td>
</tr>
<tr>
<td>Software Development elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

School Based Assessment 20%
基督教女青年會丘佐榮中學
新高中課程
中國歷史科

甲部：課程架構及課時分配

<table>
<thead>
<tr>
<th></th>
<th>比重</th>
<th>課時</th>
</tr>
</thead>
<tbody>
<tr>
<td>中國歷史概論（不列人公開評核範圍）</td>
<td>3% (約8小時)</td>
<td></td>
</tr>
<tr>
<td>歷史研習的態度與方法（不列入公開評核範圍）</td>
<td>5.6% (約15小時)</td>
<td></td>
</tr>
<tr>
<td>必修部分</td>
<td>51.9% (約140小時)</td>
<td></td>
</tr>
<tr>
<td>選修部分（歷史專題）</td>
<td>29.6% (約80小時)</td>
<td></td>
</tr>
</tbody>
</table>

乙部：課程內容

必修部份

甲部：上古至十九世紀中葉
自夏代至十九世紀中葉，分為五個時期，每個時期選取能突顯該時期特色的課題，供學生學習。

乙部：十九世紀中葉至二十世紀末
自十九世紀中葉至二十世紀末，分為三個時期，每個時期選取能突顯該時期特色的課題，供學生學習。

選修部份

下列六個「歷史專題」，選讀兩個單元
1. 「二十世紀中國傳統文化的發展」
2. 「地域與資源運用」
3. 「時代與知識分子」
4. 「制度與政治演變」
5. 「宗教傳播與文化交流」
6. 「女性社會地位：傳統與變遷」

丙部：評估方式 / 評估設計

公開考試
本科公開考試分兩卷進行：

<p>| | | | |</p>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>内容</th>
<th>比重</th>
<th>評核形式</th>
<th>考試時間</th>
</tr>
</thead>
<tbody>
<tr>
<td>卷一 历代发展</td>
<td>48%</td>
<td>設必答題，涵蓋甲、乙部，佔 40 分（提供多項資料，考核學生不同能力，預期作答時間為 55 分鐘）；其餘甲部及乙部各設三題，考生須分別選答其中一題，佔 50 分。</td>
<td>2 小時 15 分</td>
</tr>
<tr>
<td>卷二 历史專題</td>
<td>50 分</td>
<td>設六單元，每單元各設三題，學生從所選的兩個單元中各選答一題，共答兩題完卷。</td>
<td>1小時 20 分鐘</td>
</tr>
</tbody>
</table>
Part 1: Curriculum framework and time allocation

<table>
<thead>
<tr>
<th>Component</th>
<th>Outline</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public examination*</td>
<td>Paper 1 Data-based Questions</td>
<td>60%</td>
<td>2 hours</td>
</tr>
<tr>
<td></td>
<td>Paper 2 Essay-type Questions</td>
<td>40%</td>
<td>1 1/2 hours</td>
</tr>
</tbody>
</table>

* Theme A (3)(ii) and Theme B (4)(iii)b will only be examined in Paper 2.

1. Paper 1 will consist of data-based questions. Candidates should attempt all the questions. Various types of historical sources will be used, which may include extracts from written sources, statistics, and visual material such as maps, cartoons and photographs.
2. Paper 2 will consist of seven essay-type questions, of which candidates may attempt any two.
The Y.W.C.A. Hioe Tjo Yoeng College
Senior Secondary Curriculum

Economics

Part 1: Curriculum framework and time allocation

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory Part</td>
<td>77.6 %</td>
<td>194</td>
</tr>
<tr>
<td>Elective Part</td>
<td>8.8 %</td>
<td>22</td>
</tr>
<tr>
<td>Enquiry Activities</td>
<td>13.6 %</td>
<td>34</td>
</tr>
</tbody>
</table>

Total lesson time: 250 hours for S4 to S6

Part 2: Curriculum

Compulsory Part - both core and extended components will be covered

I. Basic Economic Concepts
   a. Scarcity, choice, opportunity cost and the three basic economic problems
   b. Positive and normative statements

II. Firms and Production
   a. Ownership of firms and types of goods and services produced
   b. The objectives of firms and firms in different types/stages of production
   c. Factors of production and division of labour
   d. Production and costs in the short run and long run

III. Market and Price
   a. Law of demand
   b. Individual demand and market demand
   c. Individual supply and market supply
   d. Interaction between demand and supply and functions of prices
   e. Consumer and producer surplus
   f. Price elasticity of demand and price elasticity of supply
   g. Market intervention

IV. Competition and Market Structure
   a. Perfect competition and imperfect competition (monopolistic competition, oligopoly and monopoly)

V. Efficiency, Equity and the Role of Government
   a. Efficiency and equity and the policy concerns

VI. Measurement of Economic Performance
   a. National income and general price level and its measurements
   b. Unemployment and underemployment rates
   c. Recent trends of national income, general price level and unemployment in Hong Kong

VII. National Income Determination and Price Level
   a. Aggregate demand (AD) and Aggregate supply (AS)
   b. The determination of level of output and price

VIII. Money and Banking
   a. Money and banks
   b. Money supply and money demand
   c. Determination of interest rate in the money market
   d. Hong Kong as a financial centre

IX. Macroeconomic Problems and Policies
   a. Business cycles
   b. Inflation and deflation and unemployment
   c. Fiscal policy and monetary policy

X. International Trade and Finance
   a. Free trade and trade barriers
   b. Brief introduction to the balance of payments account
   c. Exchange rate
**Elective Part**
The following elective has been selected:

**XI. Extension of Trade Theory, Economic Growth and Development**
- a. Illustration of gains from trade with the aid of production possibilities frontier
- b. Comparative advantage and its relation to globalization
- c. Measurement of economic growth and development

**Investigative Study**
Students are required to conduct 54 hours of enquiry study to complete a number of economic analyses and investigations, and produce a written report on each of the tasks performed. Through these tasks, the students are to develop ability in analysing issues from the economic perspective and other generic skills. Students learn to analyse economic issues in news articles, with the emphasis on the application and integration of economic principles and theories. Through doing essays / reports, students record the self-directed exploration and analysis of economic issues.

**Part 3: Assessment**

<table>
<thead>
<tr>
<th>Component</th>
<th>Paper 1</th>
<th>Paper 2</th>
<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Examination</td>
<td>Multiple-choice questions will be set on the compulsory part of the curriculum. All questions are compulsory.</td>
<td>Section A: Short questions will be set on the compulsory part of the curriculum. All questions are compulsory.</td>
<td>30%</td>
<td>1 hour</td>
</tr>
<tr>
<td></td>
<td>Section B: Structured / essay-type questions will be set on the compulsory part of the curriculum. All questions are compulsory.</td>
<td>Section C: Structured / essay-type questions will be set on the elective parts of the curriculum. Candidates are only required to attempt the questions from one of the two elective parts.</td>
<td>70%</td>
<td>2 hours 30 minutes</td>
</tr>
</tbody>
</table>
The Y.W.C.A. Hioe Tjo Yoeng College
Senior Secondary Curriculum

Geography

Part 1: Curriculum framework and time allocation

<table>
<thead>
<tr>
<th></th>
<th>Compulsory Part</th>
<th>Elective Part</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>75% (187.5 hours)</td>
<td>25% (62.5 hours)</td>
</tr>
</tbody>
</table>

Total lesson time: 250 hours for S4 to S6

Part 2: Curriculum (content, modules, others)

Compulsory Part:

A Living with Our Physical Environment
   ① Opportunities & Risks
   ② Managing River and Coastal Environments

B Facing Changes in the Human Environment
   ① Changing Industrial location
   ② Building Sustainable City

C Confronting Global Challenges
   ① Combating famine
   ② Disappearing Green Canopy
   ③ Global Warming

Elective Part:

The following electives have been selected
I Dynamic Earth
II A regional study of the Zhujiang Delta

Field Work Study:

- To identify spatial patterns through field observation;
- To locate and collect first-hand data and to conduct geographical enquiry that involves hypothesis testing, decision-making and value judgments.
With effect from the 2019 Examination

<table>
<thead>
<tr>
<th>Component</th>
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<th>Weighting</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Examination</td>
<td>Paper 1 (Compulsory Part)</td>
<td>20%</td>
<td>2½ hours</td>
</tr>
<tr>
<td></td>
<td>Section A: Multiple-choice Questions</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section B: Fieldwork-based Question</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section C: Data/Skill-based/Structured Questions</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Section D: Short Essay Questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper 2 (Elective Part)</td>
<td>Section E: Data/Skill-based/Structured Questions</td>
<td>15%</td>
<td>1¼ hours</td>
</tr>
<tr>
<td></td>
<td>Section F: Short Essay Questions</td>
<td>10%</td>
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</tbody>
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THE END