


初中科學教育 (中一及中二)

1. 教學目標

- 1.1 讓學生掌握基本科學知識和技能，以發展學生科學探索的能力。
- 1.2 培養學生科學態度，發展好奇心及探究興趣，及對科技的關注。
- 1.3 讓學生學懂應用科學知識及方法以解決問題。
- 1.4 培養公民責任感，懂得愛護環境及善用資源。

2. 教學策略

- 2.1 採用「探究式教學」：從日常生活事例帶出問題，鼓勵學生參與提問、討論、設計實驗以找出答案。
- 2.2 推行專題作業、資料蒐集、小組協作、網上學習等多元化學習活動。
- 2.3 定期全級統一測驗，以培養學生良好的溫習習慣。
- 2.4 鼓勵同學閱讀科普書籍及積極參與和科學及科技相關的校外活動及比賽，開展同學的科學視野。
- 2.5 學習基礎課題，讓學生可探索個人學習興趣，因應學習表現和需要，以選修高中科學科目。
- 2.6 校本科學資優學習課程為對科學感興趣或具備較佳科學能力的學生提供機會去掌握適合及高階的科學研究技巧及態度。
- 2.7 善用電子教學工具及配合 STEM 教育推動，讓學生鞏固所學及應用知識與技能以解決與科學相關的問題。

3. 以英語為教學語言的措施

- 3.1 中一及中二級全部課題以英語教授。英語銜接學習材料滲入各級教學課題。此外，各級教學課題內容附加英文課題學習手冊，協助同學使用英語學習，以銜接高中級科學科以英語教學的學習。
- 3.2 中三級科學教育劃分為物理、化學及生物科，補充教學材料滲入各課題中，使學生能具備以英語學習高中級科學科的能力。
- 3.3 在課程中引入英語詞彙及練習，藉此加強培訓學生的表達能力，學習使用相關詞彙及簡單句子來表達本科知識。

4. 評核方法

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| 4.1 考試 | 70 % |
| 4.2 持續評估
(課堂學習表現、功課表現及課堂測驗、統一測驗) | 30 % |





Science Education for Junior Secondary Levels (S1 and S2)

Teaching Objectives

- 1.1 To cultivate in students the basic scientific skills and knowledge, enabling them to develop further their exploratory capabilities in science.
- 1.2 To instill in students the objective and scientific attitude towards matters, to develop their curiosity and exploratory interest, raising their concerns for science and technology.
- 1.3 To teach students to solve problems with scientific knowledge and methods.
- 1.4 To cultivate the students' sense of civic responsibility, caring for the environment and using resources wisely.

Teaching Strategies

- 2.1 To adopt the Enquiry Learning Approach: Using real-life scenario to encourage students to ask questions, discuss issues and design appropriate experiments to find the solutions.
- 2.2 To enrich learning activities through project learning, data research, group work and e-learning.
- 2.3 To instill in students a regular revision habit with regular uniform tests.
- 2.4 To encourage students to expand their reading repertoire by covering interesting science materials and to encourage students to participate in various outside-school activities and competitions related to science and technology. These aim to broaden their horizons.
- 2.5 With the knowledge gained from the foundation curriculum, together with students' performance, students would be able to choose the correct science subjects in the senior secondary levels.
- 2.6 School-based gifted education programmes for elite students are launched for cultivating them with proper and advanced scientific skills and attitudes towards learning science.
- 2.7 Assisted by e-learning tools and promoted by STEM education initiative, students can consolidate their learning and learn to apply their knowledge in tackling science-related problems in real-life situations.

EMI Measures

- 3.1 All topics for S1 and S2 are taught through EMI. Bridging materials for the transition to learning science in English are incorporated in various chapters in junior forms. Teaching units in junior secondary levels are supplemented with Unit Handbooks and Supplementary Exercises to facilitate learning in English.
- 3.2 S3 students are required to study Physics, Chemistry and Biology. Supplementary learning materials are provided for the subjects in order to equip students with good command of English for learning science in senior secondary levels.
- 3.3 English vocabulary lists and exercises are given to students for the teaching materials of the junior form so that students can learn to express their subject knowledge in English.

Assessment

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| 4.1 Examination | 70 % |
| 4.2 Continuous Assessment
(Lesson Performance, Assignments and Quizzes, Uniform Tests) | 30 % |

