

Physical Education

Introduction

1. Physical Education (PE) develops the skills, knowledge, values and attitudes needed for establishing and enjoying an active and healthy lifestyle, as well as building student confidence and competence in facing challenges as individuals and in groups or teams, through a wide range of learning activities.

2. PE is offered as an elective examination subject at senior secondary education level. It emphasises the connection between theory and practical skills and is designed to develop the interest and potential of students in the areas of PE and sports. It will help students gain a deeper understanding of theories and applications in the fields of human movement and health, and it will promote the well-being of individuals and society.

3. The curriculum for PE builds on the prior knowledge and skills that students will have obtained through the Basic Education PE Curriculum and other Key Learning Areas. The concepts on fitness and health will be strengthened and new elements on sports psychology, biomechanics, and sports and recreation will be added. The senior secondary PE curriculum will continue to enhance the six strands in PE and develop students' collaboration and communication skills, creativity and critical thinking skills as a basis for further studies and career development.

Rationale

4. It is generally accepted that encouraging a healthy lifestyle characterised by regular physical activity in children is a world-wide priority for future health to overcome the challenges posed by sedentary lifestyles¹. Like many other major cities in the world, Hong Kong is facing the same problems. The PE Curriculum is designed to address the problems of obesity and lack of physical fitness, by providing students with the knowledge to make an informed choice of lifestyle. Through a combination of theory and practical work, the PE curriculum will foster healthy living and contribute to the development of *well-being*.

5. The PE Curriculum will also help to promote the development of a *life-long interest* in sports participation. Over the past few years, a culture of sports participation has been growing. This is partly in response to increased government provision of recreational facilities, physical activities and health education programmes, and better access to them,

¹ World Health Organisation. (2002). *Physical Activity and Health*. Fifty-fifth World Health Assembly, Document WHA55.23. WHO, Diet, Geneva.

making them more popular. At school level, our students in general enjoy participating in physical activities, as a result of the unfailing efforts of schools, parents and various agencies (e.g. sports governing bodies, Hong Kong School Sports Federation and Hong Kong Schools Dance Association). In order to sustain this new sportive culture, the PE Curriculum aims to provide the knowledge and skills needed by those who are interested in participating in sports safely and enjoyably.

6. The PE Elective is a three-year course leading to a public examination. It not only builds on the strengths of the existing PE curriculum at Basic Education level but also helps students with an interest in PE and sports to establish a solid foundation for *further studies* and *advancement*. The breadth of the Curriculum, with its variety and flexibility, enables students to advance smoothly to higher education and to possible future careers in human biology, nursing, physiotherapy, occupational therapy, PE, sports and recreation etc. The PE curriculum will contribute to the development of generic skills as well as positive values and attitudes, especially *perseverance* and *sportsmanship*. All of this is in line with the appeal from the World Health Organisation (WHO), for the building of a long-term capacity for a healthy community².

Curriculum Aims

7. The aims of the curriculum are to enable students to:
- (a) acquire a broad range of integrated knowledge, and enhance understanding and skills for further education and a future career;
 - (b) apply knowledge and skills to make informed decisions and judgments, and to initiate, plan, perform and evaluate PE, sports and recreation, and health activities;
 - (c) enhance generic capacity, in particular, collaboration skills, communication skills, critical thinking, creativity and aesthetic appreciation, as a basis for further studies and career development;
 - (d) develop commitment towards the improvement of individual well-being and the further development of an active and healthy society;
 - (e) become responsible citizens who can demonstrate desirable behaviours and a sense of commitment towards the betterment of their life, community, nation and the world.

²World Health Organisation. (2004). *Global Strategy on Diet, Physical Activity and Health*. Fifty-seventh World Health Assembly. WHO, Document WHA57.17, Geneva

Curriculum Framework

(This part should be read in conjunction with the section “Curriculum Framework” of the Main Document. It should be noted that the curriculum framework suggested below is for initial consultation only. Feedback from the public will be taken into account and further details will be provided in the next stage of consultation.)

8. To achieve the aims of the PE Elective, the following modules and time allocation are recommended:

Lesson Time: 255 hours

Modules	Suggested lesson time (hrs)
1. Wellness and Physical Education 1.1 Definition and Components of Wellness 1.2 Relationships Between Wellness and Physical Education 1.3 Relationships Between Wellness and Sport and Recreation	20
2. Human Body and Movement Analysis 2.1 Human Anatomy 2.1.1 Cardiovascular system 2.1.2 Musculo-skeletal system 2.2 Growth and Development 2.3 Bio-mechanics 2.3.1 Centre of gravity 2.3.2 Lever system 2.3.3 Motion and force 2.3.4 Application of bio-mechanics to physical activities 2.4 Movement Control	30
3. Physiological Basis for Exercise and Sports Training 3.1 Energy Production 3.1.1 Aerobic system 3.1.2 Anaerobic system 3.1.3 Different sports and energy expenditure 3.2 Physiological Factors Affecting Performance 3.2.1 Age 3.2.2 Body composition 3.2.3 Cardio-respiratory fitness 3.2.4 Cold 3.2.5 Drugs 3.2.6 Flexibility 3.2.7 Gender 3.2.8 Heat	50
3.2.9 Heredity 3.2.10 Humidity 3.2.11 Muscular fitness 3.2.12 Somatotype and physique	

Modules	Suggested lesson time (hrs)
3.3 Concepts and Principles of Training 3.3.1 Concepts of training 3.3.2 Basic considerations in training 3.3.3 Training programme for different groups 3.4 Training Methods 3.4.1 Training principles for aerobic exercise 3.4.2 Training principles for anaerobic exercise 3.4.3 Different training methods 3.5 Training Effects 3.6 Detraining Effects	
4. Health, Fitness and Nutrition 4.1 Component of Health 4.1.1 Physical health 4.1.2 Mental health 4.1.3 Social health 4.2 Health and Exercise 4.3 Prevention of Disease 4.3.1 Coronary heart disease 4.3.2 Diabetes 4.3.3 Hypertension 4.3.4 Hypokinetic degeneration 4.3.5 Obesity 4.4 Food and Nutrition 4.4.1 Carbohydrates 4.4.2 Proteins 4.4.3 Fats 4.4.4 Vitamins and minerals 4.4.5 A balance diet 4.4.6 Diet and general health 4.4.7 Nutrition and physical performance 4.4.8 Diet before, during and following exercise 4.5 Desirable Practice 4.5.1 Healthy diet 4.5.2 Habitual exercise 4.5.3 Sufficient rest and relaxation 4.5.4 No substance abuse 4.5.5 Good posture 4.6 Body Composition and Obesity 4.6.1 Body composition 4.6.2 Body fat and obesity 4.6.3 Weight control 4.7 Definition of Physical Fitness 4.8 Components of Physical Fitness 4.8.1 Cardio-respiratory fitness 4.8.2 Flexibility 4.8.3 Muscular strength and endurance 4.9 Test and Measurement of Physical Fitness	50

Modules	Suggested lesson time (hrs)
4.10 Definition of Sports-related Fitness 4.11 Components of Sports-related Fitness 4.11.1 Agility 4.11.2 Balance 4.11.3 Endurance 4.11.4 Flexibility 4.11.5 Reaction time 4.11.6 Speed 4.11.7 Strength 4.12 Test and Measurement of Sports-related Fitness 4.13 Exercise Prescriptions	
5. Safety, Sports Injuries and First Aid 5.1 Safety Precautions 5.2 Common Sports Injuries and Treatments 5.2.1 Abrasion 5.2.2 Contusion 5.2.3 Dislocation 5.2.4 Fracture 5.2.5 Heat injuries 5.2.6 Overuse injuries 5.2.7 Pulled muscle 5.2.8 Sprain 5.2.9 Strain 5.2.10 Tennis and golf elbow 5.3 Factors Leading to Sports Injuries 5.3.1 Environmental factors 5.3.2 Facilities and equipment 5.3.3 Level of fitness 5.3.4 Ignorance 5.3.5 Protective devices 5.3.6 Level of skill 5.3.7 Nature of sport 5.3.8 Physical limitations 5.3.9 Psychological influence 5.4 Prevention of Sports Injuries 5.4.1 Protective measures 5.4.2 Warming up and cooling down 5.5 First Aid and Treatments 5.5.1 First aid 5.5.2 Bleeding 5.5.3 PRICE 5.5.4 Resuscitation 5.5.5 Splints 5.5.6 Sports specific injuries	25
6. Psychological Aspects of Exercise and Sport 6.1 Motor Learning and learning theory	25

Modules	Suggested lesson time (hrs)
6.2 Stress and Relaxation 6.3 Psychological Factors Affecting Performance 6.3.1 Anxiety and relaxation 6.3.2 Arousal 6.3.3 Attention and concentration 6.3.4 Emotion and aggression 6.3.5 Feedback 6.3.6 Goal setting 6.3.7 Mental practice 6.3.8 Motivation and incentive 6.3.9 Personality 6.3.10 Transfer of learning	
7. Social Aspects of PE, Sports and Recreation 7.1 Roles and Values of PE, Sports and Recreation in whole person development 7.2 Philosophical Foundation, History and Development of PE, Sports and Recreation 7.2.1 Local 7.2.2 International 7.3 Olympic Movement and Olympicism 7.3.1 Philosophical Foundation, History and Development of the Olympic Games 7.3.2 International Olympic Committee and the International Sports Federations 7.3.3 National sport organisations 7.3.4 Local sport organisations 7.3.5 Politics and sports 7.3.6 Amateurs and professionals 7.3.7 Co-operation 7.3.8 Equality 7.3.9 Fair play 7.3.10 Friendship 7.3.11 Strike for excellence 7.3.12 Challenges to Olympic Movement and Olympicism 7.4 Factors Influencing Participation in Sports and Recreation 7.4.1 Culture 7.4.2 Family 7.4.3 Gender 7.4.4 Media 7.4.5 Peers 7.4.6 School 7.4.7 Socio-economic class 7.5 Sport and Society 7.5.1 Culture 7.5.2 Competition, competitive behaviour and the consequences of competition 7.5.3 Sport for all and sport for the elite	25

Modules	Suggested lesson time (hrs)
7.5.4 Violence	
8. Administration in PE, Sports and Recreation 8.1 Programme Planning and Implementation 8.1.1 Proposals and action plans 8.1.2 Implementation and monitoring 8.1.3 Evaluation 8.2 Sports Management 8.2.1 Personnel management 8.2.2 Sports facilities and management 8.2.3 Public Relations 8.3 Financial Control 8.4 Legal Aspect in PE, Sports and Recreation 8.5 Personal Development 8.6 Customer Service and Public Relations	30
Total:	255

Learning and Teaching

9. As students differ in abilities and learn differently, a variety of approaches will be used to suit students' needs. This will help to raise students' interest in the subject and to develop the necessary skills, knowledge and understanding, values and attitudes and generic skills. It is important to link theory to practice and enable students to apply their learning to daily life. An interactive approach will be used to facilitate the development of students' higher order thinking skills.

10. To maximise students' learning, effective use of school and community resources will be made, and life-wide learning opportunities provided.

Assessment

(This part should be read in conjunction with the section "Assessment" of the Main Document.)

11. Assessment is the practice of collecting evidence of student learning. The aims are to improve learning and teaching and to recognise the achievement of students. Assessment is an integral part of learning and teaching. A balance should be maintained between formative and summative assessment, and assessment design should be aligned with the curriculum aims and the processes of learning and teaching.

Internal Assessment

12. Internal assessment refers to the assessment practices that schools employ as part of the learning and teaching process during the three years of study of PE. Internal assessment should take account of curriculum plans, student progress, the abilities of the students, and the school context. During the three years of senior secondary education, schools should assess students formatively in order to collect information and provide feedback to students on what they have learned and achieved and on how they can improve. This will help to motivate student learning and help teachers to find ways of promoting more effective learning and teaching.

13. A range of assessment modes should be employed to cover the full range of learning outcomes - skills, knowledge, values and attitudes.

Public Assessment

14. Public assessment of the PE Elective will lead to a qualification in the subject to be offered by the Hong Kong Examinations and Assessment Authority. In the public assessment of the PE Elective, a standards-referenced approach will be adopted for grading and reporting student performance. The purpose of this approach is to recognise what each student can do in each subject at the end of the 3-year senior secondary education. The performance of each student will be matched against a set of performance standards in the form of descriptors indicating what a student must be able to do to merit a particular grade, instead of compared with the performance of other students. Descriptors will be provided for the set of standards at a later stage.

15. The PE public examination will include the assessment of both practical work and student understanding of the theories introduced. It will include a School-based Assessment (SBA) component that will take up 30% of the total weighting in the public assessment while the external assessment will carry 70%. The external assessment will comprise a fitness test and a written paper of two and a half hours. The merits of adopting SBA are as follows:

- (a) SBA provides a more valid assessment than an external examination alone, since it can cover a more extensive range of learning outcomes through employing a wider range of assessment modes that are not all possible in written examinations.
- (b) SBA enables the sustained work of students to be assessed. It provides a more comprehensive picture of student performance throughout the period of study rather than their performance in a one-off examination alone.

16. It should be noted that SBA is not an “add-on” element in the curriculum. Assessing student performance through practices such as class discussion and class observation is a normal in-class and out of class activity. The assessment modes selected for SBA in PE will be appropriate to the learning objectives and processes that are to be assessed. The design and implementation of SBA should avoid unduly increasing the workload of both teachers and students.

Supporting Measures

17. Resource materials will be developed in partnership with teachers and tertiary institutes for teachers’ reference.

18. Professional development programmes will be organised to familiarise teachers with the curriculum and the pedagogy. The programmes will cover the following areas:

Issues		Duration (hr.)
1	Rationale of the Curriculum	2
2	Updating of knowledge	30
3	Pedagogy and use of supporting resources	10
4	Assessment	8
Total		50

19. More details of the above supporting measures will be announced through the CDI’s website for PE (<http://www.emb.gov.hk/cd>). Teachers are also invited to check the EMB Training Calendar regularly for information on professional development programmes.