**Applied Learning (Senior Secondary Level)**

**2019-21 Cohort**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>1. Subject Title</td>
<td>Exercise Science and Health Fitness</td>
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<tr>
<td>2. Course Provider</td>
<td>School of Continuing Education, Hong Kong Baptist University</td>
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<td>3. Area of Studies/Course Cluster</td>
<td>Applied Science/Sports</td>
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<td>4. Medium of Instruction</td>
<td>Chinese</td>
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<td>5. Learning Outcomes</td>
<td>Upon completion of the subject, students should be able to:</td>
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<td>(1) describe the basic concepts of exercise science and health fitness;</td>
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<td>(2) design and conduct simple and appropriate physical wellness activities according to the needs of individuals and groups;</td>
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<td>(3) demonstrate a positive attitude towards the benefits of physical activities and an awareness of the importance of promoting health fitness in modern society;</td>
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<td>(4) apply the principles of exercise science and health fitness to enhance their own and others’ exercise performance;</td>
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<td>(5) demonstrate basic coaching and communication skills required in exercise instruction;</td>
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<td>(6) demonstrate self-motivation and confidence in conducting practicum and have the ability to work individually and collaboratively; and</td>
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<td></td>
<td>(7) develop self-understanding for further studies and career development in the related field.</td>
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6. Curriculum Map – Organisation and Structure

**Core (165 hours)**

- **Sports and Recreation Industry in Hong Kong (15 hrs)**
  - Historical development of sports and sports industry in Hong Kong
  - Elements of sports and recreation activities development
  - Elite sports development

- **Psychology of Exercise, Coaching and Team Building (24 hrs)**
  - Importance of interpersonal influence and personal character
  - Effects of psychological and social factors on exercise performance
  - Professional ethics in coaching
  - Communication and motivation techniques in coaching
  - Effects of intrinsic and extrinsic factors on motivation
  - Problem solving and decision making skills via team building activities

- **Nutrition and Health (24 hrs)**
  - Nutritional concepts
  - Weight management
  - Nutrition and exercise
  - Well-being and healthy lifestyle: the relationship between food and nutrition
  - Nutrition for special populations

- **Exercise Physiology (12 hrs)**
  - Systems of human body
  - Principle of body movement
  - Theory of exercise science

- **Prevention and Basic Treatment in Exercise injuries (15 hrs)**
  - Importance of prevention and care of exercise injuries
  - Common exercise injuries
  - Ways of exercise injury prevention
  - Care of exercise injuries

- **Sports and Recreation Management (30 hrs)**
  - Components, organisation and elements of fitness programmes and recreation activities
  - Needs identification and assessment
  - Programme/Activity design and promotion
  - Budgeting and resources management
  - Programme/Activity evaluation

- **Fitness Training and Assessment (30 hrs)**
  - Self fitness level
  - Anthropological measurement
  - Hands-on experience in fitness testing
  - Interpretation of fitness testing results
  - Training principles
  - Techniques of conducting fitness training activities
  - Safety measures of fitness training
  - Professional knowledge in designing training programmes for specific exercise

- **Group Exercise Practicum (15 hrs)**
  - Training principles of group exercise practicum
  - Safety measures of conducting group exercise practicum
  - Techniques of leading group exercise practicum

**Elective (15 hours)**

*Students are required to choose one elective module*

<table>
<thead>
<tr>
<th>Elective Module 1: Design of Elite Sports Training</th>
<th>Elective Module 2: Health Care Consultancy Report</th>
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<tbody>
<tr>
<td>- Training of elite sports</td>
<td>- Importance of a health care consultancy report</td>
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<tr>
<td>- Lifestyle and attitude of professional athletes</td>
<td>- Positive attitude towards a healthy lifestyle</td>
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<tr>
<td>- Research on elite training</td>
<td>- Research on health care consultancy report</td>
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<tr>
<td>- Project work and presentation skills</td>
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**Exercise Science Practicum (15 hrs)**

- Exercise Science Practicum (15 hrs)
  - Training principles of group exercise practicum
  - Safety measures of conducting group exercise practicum
  - Techniques of leading group exercise practicum
7. The Context

• The information on possible study and career pathways is provided to enhance students’ understanding of the wider context of the specific Applied Learning course. Students who have successfully completed Applied Learning courses have to meet other entry requirements as specified by the institutions.
• The recognition of Applied Learning courses for admission to further studies and career opportunities is at the discretion of relevant institutions. The Education Bureau and the course providers of Applied Learning are exploring and seeking recognition related to further education and career development opportunities for students successfully completing the Applied Learning courses.

Possible further study and career pathways

Further studies
• e.g. sports science, sports coaching, physical education, recreation management

Career development
• e.g. sports coaches, fitness instructors, teachers/teaching assistants in Physical Education, sports executives, recreation facilities managers

Relations with core subjects and other elective subjects

Enhancing and enriching, e.g.
• the study of human physiology and anatomy in exercise science enriches the study of human body in Biology and the module ‘Science in a Sprint’ in Integrated Science

Cross-fertilisation, e.g.
• the concepts of forces and motion in Physics can be applied in different types of sports activities

Expanding horizons, e.g.
• students taking Personal, Social and Humanities Education subjects gain exposure and diversified learning experiences through practicum and field visits

Cluster of professions/trades/industries related to the course

• e.g. sports coaching, health fitness related industries, physical education, recreation management, sports administration

Future global and local outlook

• health statistics show that obesity has become a major health problem affecting physical health, work productivity and medical expenses
• it is increasingly being recognised that physical fitness is essential for leading a healthy life. Regular exercise therefore has an important role to play in maintaining and enhancing social well-being
• the demand for professional staff in the sports industry (e.g. health club, schools) is increasing
• health promotion is given top priority in many countries

Beginners’ skill set to facilitate entry to further studies and/or work

• understanding the concepts of health fitness and exercise science
• acquiring basic coaching and communication skills required in exercise instruction
• understanding the process of scientific inquiry and its application to sports
• being aware of social, legal and ethical responsibilities related to the application of science
• applying scientific knowledge and skills in daily life and work-related contexts
• exploring the aptitudes and ability required in selected career clusters in applied science and developing a personal roadmap to articulate to different levels of qualifications

Foundation knowledge developed in junior secondary education and Secondary 4

The subject is built upon the foundation knowledge students acquired in, e.g.
• Science Education - fundamental scientific concepts, experiment design and laboratory techniques
• Physical Education - body movement, nutrition and diet

Relations with other areas of studies/courses of Applied Learning

Business, Management and Law
• the subject can stimulate ideas for creating new business opportunities in the fitness industry.

Services
• the subject can equip students with people skills which are essential in the service industry