#### REGULATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN EXERCISE AND HEALTH (BSc[Exercise&Health])

These regulations apply to students admitted to the 4-year Bachelor of Science in Exercise and Health (BSc[Exercise&Health]) curriculum in the academic year 2016-17 and thereafter. See also General Regulations and Regulations for First Degree Curricula.

The degree of Bachelor of Science in Exercise and Health (BSc[Exercise&Health]) is awarded for the satisfactory completion, on a full-time basis, of a prescribed programme of study in Exercise Science.

### EH1 Admission to the degree

To be eligible for admission to the degree of Bachelor of Science in Exercise and Health, candidates shall

- (a) comply with the General Regulations;
- (b) comply with the Regulations for First Degree Curricula; and
- (c) satisfy all the requirements of the curriculum in accordance with these regulations and the syllabuses.

#### EH2 Length of curriculum

The curriculum for the degree of Bachelor of Science in Exercise and Health shall normally require eight semesters of full-time study, extending over not fewer than four academic years, and shall include any assessment to be held during and/or at the end of each semester. Candidates shall not in any case be permitted to extend their studies beyond the maximum period of registration of six academic years, unless otherwise permitted or required by the Board of the Faculty.

### EH3 Selection of courses

- (a) Candidates shall select their courses in accordance with these regulations and the guidelines specified in the syllabuses before the beginning of each semester. Changes to the selection of courses may be made only during the add/drop period of the semester in which the course begins, and such changes shall not be recorded on the transcript of the candidate. Requests for changes after the designated add/drop period of the semester shall not normally be considered.
- (b) Withdrawal from courses beyond the designated add/drop period will not be permitted, unless under exceptional circumstances approved by the Board of the Faculty.

#### EH4 Curriculum requirements

- (a) To complete the curriculum, candidates shall follow instruction in the syllabuses prescribed and
  - (i) satisfy the requirements prescribed in UG5 of the Regulations for First Degree Curricula;
  - (ii) complete successfully not fewer than 240 credits in the manner specified in these regulations and the syllabuses, comprising:
    - a 96-credit Major in Exercise Science, including 24 credits of specialism courses, and a 12-credit dissertation as a Capstone Experience;
    - 18 credits in language enhancement courses, including 6 credits in Core University

English<sup>1</sup>, 6 credits in English in the Discipline and 6 credits in Chinese language enhancement<sup>2</sup>;

- 36 credits of courses in the Common Core Curriculum, comprising at least one and not more than two courses from each Area of Inquiry with not more than 24 credits of courses being selected within one academic year except where candidates are required to make up for failed credits; and
- 90 credits in elective courses, which may include courses within the curriculum and/or minor(s) offered in other curricula.
- (b) Candidates shall normally be required to take not fewer than 24 credits nor more than 30 credits in any one semester (except the summer semester) unless otherwise permitted or required by the Board of the Faculty, or except in the last semester of study when the number of outstanding credits required to complete the curriculum requirements is fewer than 24 credits.
- (c) Candidates may, of their own volition, take additional credits not exceeding 6 credits in each semester, and/or further credits during the summer semester, accumulating up to a maximum of 72 credits in one academic year. With the special permission of the Board of the Faculty, candidates may exceed the annual study load of 72 credits in a given academic year provided that the total number of credits taken does not exceed the maximum curriculum study load of 288 credits for the normative period of study specified in the curriculum regulations, save as provided for under EH4(d).
- (d) Where candidates are required to make up for failed credits, the Board of the Faculty may give permission for candidates to exceed the annual study load of 72 credits provided that the total number of credits taken does not exceed the maximum curriculum study load of 432 credits for the maximum period of registration specified in the curriculum regulations.

#### EH5 Advanced standing and credit transfer

- (a) Advanced standing may be granted to candidates in recognition of studies completed successfully in an approved institution of higher education elsewhere in accordance with UG2 of the Regulations for First Degree Curricula. Credits granted for advanced standing shall not be included in the calculation of the GPA but will be recorded on the transcript of the candidate.
- (b) Candidates may, with the approval of the Board of the Faculty, transfer credits for courses completed at other institutions at any time during their candidature. The number of transferred credits will be recorded on the transcript of the candidate, but the results of courses completed at other institutions shall not be included in the calculation of the GPA. The number of credits to be transferred shall not exceed half of the total credits normally required under the degree curricular of the candidates during their candidature at the University.

#### EH6 Assessment and grades

(a) Candidates shall be assessed for each of the courses for which they have registered, and assessment may be conducted in any combination of coursework, written examinations and/or other assessable activities.

<sup>&</sup>lt;sup>1</sup> Candidates who have achieved Level 5\*\* in English Language in the Hong Kong Diploma of Secondary Education Examination, or equivalent, are exempted from this requirement and should take a 6-credit elective course in lieu.

<sup>&</sup>lt;sup>2</sup> Candidates are required to successfully complete the 6-credit CEDU9006 Practical Chinese for BSc (Exercise & Health) Students, except for:

<sup>(</sup>a) Putonghua-speaking candidates who should take CUND9002 Practical Chinese and Hong Kong Society or CUND9003 Cantonese for Non-Cantonese Speaking Students; and

<sup>(</sup>b) candidates who have not studied Chinese language during their secondary education or who have not attained the requisite level of competence in the Chinese language to take CEDU9006 should write to the Board of the Faculty to apply for exemption from the Chinese language requirement, and

<sup>(</sup>i) take a 6-credit Cantonese or Putonghua language course offered by the School of Chinese especially for international and exchange students; OR

<sup>(</sup>ii) take an elective in lieu.

Only passed courses will earn credits. Grades shall be awarded in accordance with UG8 of the Regulations for First Degree Curricula.

- (b) Courses in which candidates are given an F grade shall be recorded on the transcript of the candidate, together with the new grade if the candidate is re-examined as a second attempt or retakes the failed course. All failed grades shall be included in calculating the GPA and shall be taken into account for the purposes of determining eligibility for award of the BSc(Exercise&Health) degree, honours classification and whether a candidate shall be recommended for discontinuation of studies.
- (c) Candidates shall not be permitted to repeat a course for which they have received a D grade or above for the purpose of upgrading.
- (d) There shall be no appeal against the results of examinations and all other forms of assessment.

#### EH7 Absence from examinations

- (a) Candidates who are unable, because of illness, to be present at the written examination of any course may apply for permission to present themselves at a supplementary examination of the same course to be held before the beginning of the First Semester of the following academic year. Any such application shall be made within two weeks of the first day of the candidate's absence from any examination. Any supplementary examination shall be part of that academic year's examinations, and the provisions made in these regulations for failure at the first attempt shall apply accordingly.
- (b) If a candidate is absent from the supplementary examination, further rescheduling of the examination shall not normally be granted unless under exceptional circumstances approved by the Board of Examiners. The candidate will deem to have failed the course concerned and be required to make up for the course as stipulated in Regulation EH8.

#### EH8 Retaking/re-examination of failed course(s)

- (a) Candidates who have failed to satisfy the examiners in course(s), but have
  - completed successfully 36 or more credits in two consecutive semesters (not including the summer semester), except where candidates are not required to take such a number of credits in the two given semesters; and
  - achieved an average semester GPA of 1.0 or higher for two consecutive semesters (not including the summer semester),

shall be required, as specified by the relevant Board of Examiners:

- (i) to undergo re-assessment(s)/re-examination(s) in the failed course(s) to be held no later than the end of the following semester (not including the summer semester); or
- (ii) to re-submit failed coursework, without having to repeat the same course of instruction; or
- (iii) to retake the failed course(s) by undergoing instruction and satisfying the assessments; or

(iv) for elective course(s), to take another course in lieu and to satisfy the assessment requirements.

(b) Candidates shall not be permitted to retake a failed course or present themselves for re-examination as a second attempt if they have otherwise satisfied all the requirements stipulated in these regulations for the award of the BSc(Exercise&Health) degree.

#### **EH9** Failure in re-examination

- (a) Candidates who have failed to satisfy the examiners at re-assessment(s)/re-examination(s), granted under Regulation EH8, of course(s) in the Exercise Science Major shall normally:
  - (i) if these courses total not more than 12 credits, be permitted to progress to the following year of study and to present themselves for re-examination(s) in any prescribed form of examination;

or

- (ii) if these courses total more than 12 credits, be recommended for discontinuation of their studies as stipulated under Regulation EH10(d).
- (b) Candidates who have failed to satisfy the examiners at a supplementary examination, granted under Regulation EH7, shall be permitted to present themselves for re-assessment, in accordance with Regulation EH8, as directed by the Board of Examiners.

#### EH10 Discontinuation

Unless otherwise permitted by the Board of the Faculty, candidates shall be recommended for discontinuation of their studies if they have:

- (a) failed to complete successfully 36 or more credits in two consecutive semesters (not including the summer semester), except where candidates are not required to take such a number of credits in the two given semesters; or
- (b) failed to achieve an average Semester GPA of 1.0 or higher for two consecutive semesters (not including the summer semester); or
- (c) failed in the Capstone Experience; or
- (d) failed to satisfy the examiners at re-assessment(s)/re-examination(s) of course(s) in the Exercise Science Major, granted under Regulation EH8, of more than 12 credits; or
- (e) exceeded the maximum period of registration specified in Regulation EH2.

#### EH11 Award of the degree and honours classifications

- (a) To be eligible for the award of the degree of Bachelor of Science in Exercise and Health, candidates shall have successfully completed the curriculum as stipulated under Regulation EH4.
- (b) Honours classifications for the degree of Bachelor of Science in Exercise and Health shall be awarded in five divisions: First Class Honours, Second Class Honours Division One, Second Class Honours Division Two, Third Class Honours and Pass. The classification of honours shall be determined by the Board of Examiners for the degree in accordance with the following Cumulative GPA scores stipulated in UG9(a) of Regulations for First Degree Curricula, with all courses taken (including failed courses, but not including courses approved by the Senate graded as 'Pass', 'Fail' or 'Distinction') carrying equal weighting:

<u>Class of honours</u>	<u>CGPA range</u>
First Class Honours	3.60 - 4.30
Second Class Honours	(2.40 - 3.59)
Division One	3.00 - 3.59
Division Two	2.40 - 2.99
Third Class Honours	1.70 - 2.39
Pass	1.00 - 1.69

- (c) Honours classification may not be determined solely on the basis of a candidate's Cumulative GPA and the Board of Examiners for the degree may, at its absolute discretion and with justification, award a higher class of honours to a candidate deemed to have demonstrated meritorious academic achievement but whose Cumulative GPA falls below the range stipulated above of the higher classification by not more than 0.1 Grade Point.
- (d) A list of candidates who have successfully completed all degree requirements shall be posted on Faculty notice boards.

#### SYLLABUSES FOR THE DEGREE OF BACHELOR OF SCIENCE IN EXERCISE AND HEALTH

These syllabuses apply to students admitted to the 4-year Bachelor of Science in Exercise and Health (BSc[Exercise&Health]) curriculum in the academic year 2016-17.

#### **Overall curriculum structure**

Candidates are required to complete courses totaling not fewer than 240 credits, comprising:

Cur	Curriculum Structure		Credits
A.	University Graduation Requirements		
	Language Enhancement Courses		18
	Common Core Curriculum		36
		Sub-total:	54
B.	Major in Exercise Science		
	Science Core Courses		24
	Subject Core Courses		36
	Specialism Courses		24
	Capstone Experience		12
		Sub-total:	96
C.	Electives/Minor		90
		Total credits:	240

- (i) a 96-credit Major in Exercise Science, including 24 credits of specialism courses, and a 12-credit dissertation as a Capstone Experience;
- (ii) 18 credits in language enhancement courses, including 6 credits in Core University English<sup>1</sup>, 6 credits in English in the Discipline and 6 credits in Chinese language enhancement<sup>2</sup>;
- (iii) 36 credits of courses in the Common Core Curriculum, comprising at least one and not more than two courses from each Area of Inquiry with not more than 24 credits of courses being selected within one academic year, except where candidates are required to make up for failed credits; and
- (iv) 90 credits in elective courses, which may include courses within the curriculum and/or minor(s) offered in other curricula.

#### FIRST YEAR

Candidates shall normally take 60 credits, comprising:

- 12 credits in Science Core Courses;
- 12 credits in Subject Core Courses in the Exercise Science Major;
- a 6-credit Core University English course<sup>1</sup>;

<sup>&</sup>lt;sup>1</sup> Candidates who have achieved Level 5\*\* in English Language in the Hong Kong Diploma of Secondary Education Examination, or equivalent, are exempted from this requirement and should take a 6-credit elective course in lieu.

<sup>&</sup>lt;sup>2</sup> Candidates are required to successfully complete the 6-credit CEDU9006 Practical Chinese for BSc (Exercise & Health) Students, except for:

<sup>(</sup>a) Putonghua-speaking candidates who should take CUND9002 Practical Chinese and Hong Kong Society or CUND9003 Cantonese for Non-Cantonese Speaking Students; and

<sup>(</sup>b) candidates who have not studied Chinese language during their secondary education or who have not attained the requisite level of competence in the Chinese language to take CEDU9006 should write to the Board of the Faculty to apply for exemption from the Chinese language requirement, and

<sup>(</sup>i) take a 6-credit Cantonese or Putonghua language course offered by the School of Chinese especially for international and exchange students; OR

<sup>(</sup>ii) take an elective in lieu.

- 24 credits of courses in the Common Core Curriculum; and
- a 6-credit elective course.

## SECOND YEAR

Candidates shall normally take 60 credits, comprising:

- 12 credits in Science Core Courses;
- 24 credits in Subject Core Courses in the Exercise Science Major;
- a 6-credit English in the Discipline course;
- 12 credits of courses in the Common Core Curriculum; and
- a 6-credit elective course, which may be a course within the curriculum and/or minor(s) offered in other curricula.

### THIRD YEAR

Candidates shall normally take 60 credits, comprising:

- 12 credits in Specialism Courses in the Exercise Science Major;
- a 6-credit Chinese language enhancement course<sup>2</sup>; and
- 42 credits in elective courses, which may include courses within the curriculum and/or minor(s) offered in other curricula.

## FOURTH YEAR

Candidates shall normally take 60 credits, comprising:

- 12 credits in Specialism Courses in the Exercise Science Major;
- a 12-credit Capstone Experience; and
- 36 credits in elective courses, which may include courses within the curriculum and/or minor(s) offered in other curricula.

### MAJOR IN EXERCISE SCIENCE (96 credits)

#### Science Core Courses - Prescribed (Years 1 and 2)

Students are required to complete all the following Science Core Courses of 24 credits in total in Years 1 and 2.

#### BBMS1001 Introduction to Human Anatomy and Physiology

The course serves as a basis for understanding the normal processes of life.

This course examines the concepts related to the structure and function of the human body, including the organization of the body from single cell to the coordinated whole. Throughout the course, focus will be placed on the inter-relationship between structure and function in cells, tissues and body systems (cardiovascular, respiratory, digestive, renal, musculoskeletal, neural, immune, and endocrine systems).

Pre-requisite: HKDSE Biology or Chemistry or Combined Science with Biology or Chemistry component, or equivalent

Assessment: 40% continuous assessment; 60% examination

Remark: 1. Course pre-requisite requirement is waived for BSc(Exercise&Health) students.

2. For BSc(Exercise&Health) students, this course is replaced by BBMS1002 with effect from the 2018-19 academic year.

Year 1 (6 credits)

#### **BBMS1002** Fundamentals of Human Anatomy and Physiology

This course provides the basic concepts related to the structure and function of the human body, including the organization of the body from single cell to the coordinated whole. Particularly, the course will focus on the body systems that respond to physical exercise, including cardiovascular, respiratory, renal, musculoskeletal, neural, and endocrine. The course serves a basis for understanding the normal processes of life. In addition, the course will describe how different tissues are organised to perform the essential physiological functions in human body.

Assessment: 40% continuous assessment; 60% examination

Remark: This course is equivalent to BBMS1001.

#### **BBMS2002** Evidence-based Practice and Public Health

#### Year 2 (6 credits)

Year 1 (6 credits)

Evidence-based practice, the overarching principle of all health professions, is premised on the sciences of epidemiology and biostatistics. A solid foundation in evidence-based practice is needed to guide public health decisions. This course is for BBiomedSc, BPharm and BChinMed students with key components of epidemiology, biostatistics and public health. Biostatistics will emphasize application and interpretation, with concepts mostly integrated into epidemiology; technical calculations will be minimal. Students will be able to make sense of data, and appraise scientific evidence through an understanding of basic epidemiologic and statistical concepts. These concepts include hypothesis testing, P value, confidence interval, probability, measures of the distribution and determinants of disease, vital statistics, reliability, validity, bias, confounding, interaction, causality, and common epidemiological study designs. These serve as a foundation to understanding subsequent public health topics such as sociology of health, chronic illness and disability, global burden of disease, health promotion, health care system, health policy and health economics.

Assessment: 30% continuous assessment; 70% examination

Remark: This course is replaced by BBMS2011 with effect from the 2018-19 academic year.

#### **BBMS2004** Introduction to Human Anatomy

#### Year 1 (6 credits)

The course provides an understanding of the organization and functions of human body in relation to clinical practice. Introduction to human anatomy, cell structure, tissues, embryonic differentiation, musculoskeletal structures, brain and spinal cord, cardiovascular system, respiratory system, gastrointestinal system, endocrine system, urogenital system.

Pre-requisite: Level 3 or above in HKDSE Biology or Chemistry or Combined Science with Biology or Chemistry component, or equivalent Assessment: 30% continuous assessment; 70% examination

Remark: 1. Course pre-requisite requirement is waived for BSc(Exercise&Health) students.
2. For BSc(Exercise&Health) students, this course is replaced by BBMS2012 with effect from the 2018-19 academic year.

# **Subject Core Courses** (Years 1 and 2)

Students are required to complete EXSC1001 Foundations of Exercise Science in Year 1 and another 30 credits from the following Subject Core Courses in Years 1 and 2.

# **EXSC1001** Foundations of Exercise Science

Exercise Science is a multidisciplinary field of study encompassing an array of disciplines that contribute to our understanding of human movement. This course will introduce and expose students to

**BBMS2011 Research Methods in Medicine and Health** 

This course introduces students to a comprehensive set of knowledge and practical skills necessary for understanding, appraising, and conducting clinical research. Students will start by examining the epistemological basis of scientific inquiry and its evolution, and begin formulating relevant research questions within an empirical framework. Students will then be introduced to different approaches to answer research questions, including major epidemiologic study designs and qualitative methods, and will learn about important considerations when conducting research, including ethics, survey design, and data management & analysis. Finally, students will move past learning about the "doing" aspect of research and focus on developing skills related to interpreting and communicating results from studies.

Assessment: 60% continuous assessment; 40% examination

Remark: This course is equivalent to BBMS2002.

# **BBMS2012** Anatomy for Exercise and Health

# Year 1 (6 credits)

The course provides an understanding of the organization, structure and functions of the human body with an emphasis on major body systems pertaining to kinesiology and exercise science. Through a series of lectures, practical sessions, tutorials and peer learning activities, students will be introduced to the gross and microscopic anatomy of musculoskeletal structures, brain and spinal cord, cardiovascular system, respiratory system, and endocrine system.

Pre-requisite: Already taken or enrolled in EXSC2003 Exercise Physiology Assessment: 30% continuous assessment: 70% examination

Remark: For BSc(Exercise&Health) students, this course is equivalent to BBMS2004.

# CMED2004 Behavioural Sciences I

This course introduces the psychosocial aspects of health and illness, in contrast to the biomedical approach. Students will be introduced to key concepts in developmental psychology, health psychology, and medical sociology. The course introduces students to the human developmental process within the context of Chinese culture and also examines ways in which health is shaped by social context, culture, social structure and social processes through examining fundamental sociological theories. The course also involves a collaborative project between nursing and medical students.

Assessment: 80% continuous assessment; 20% examination

Year 2 (6 credits)

### 4

#### Year 2 (6 credits)

Year 1 (6 credits)

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the sub-disciplines of exercise science including anatomy, physiology, biomechanics, nutrition in addition to the psychosocial aspects of human health and performance. Theoretical and practical learning in each of these sub-disciplines will be combined with professional awareness and career prospects in the area of exercise and sport science.

This course will investigate the role of exercise, physical activity (PA), inactivity and sedentary behaviour in health and wellness, with particular emphasis on the role of exercise and physical activity in the prevention and treatment of major non-communicable diseases (NCDs). Key terms relating to PA

Assessment: 100% coursework

# **EXSC1002** Physical Activity and Health

will be defined. Various PA measurement methods and their use in PA epidemiology and public health research will be discussed. Students will learn about fundamental study designs and methodologies used in evaluating the impacts of PA on health. Students will obtain skills and knowledge necessary to critically evaluate evidence on health benefits of PA. Students will learn whether the beneficial impacts of PA on health outcomes are independent of, or modified by other health risk factors, such as obesity, sedentary behaviour and genetic risk..

Pre-requisite: EXSC1001 Foundations of Exercise Science Mutually exclusive: EXSC2008 Physical and Health Benefits of Exercise Assessment: 100% coursework

# **EXSC1003** Kinetic Anatomy

This course provides an introduction to the gross anatomy of the human body, with an underlying emphasis on anatomy for human movement. Areas covered usually include the tissue types, the anatomical referencing system, the axial and appendicular skeleton, important nerves, blood vessels and skeletal muscles, and an overview of the heart, lungs and viscera.

Pre-requisite: BBMS2004 Introduction to Human Anatomy or BBMS2012 Anatomy for Exercise and Health

Assessment: 30% coursework: 70% examination

# **EXSC2001** Fundamentals of Motor Control and Learning

Human movement is a highly complex process. Simply negotiating your way to lectures requires the processing of a host of sensory information, effective decision making, and the coordinated contraction and relaxation of skeletal muscles. This course offers an introductory overview of how we control movement and how we develop and refine our movement skills. Emphasis is placed on basic principles of human movement and their application to health and exercise.

Assessment: 100% coursework

# **EXSC2003** Exercise Physiology

This course will introduce the key physiological and metabolic responses to acute and chronic exercise. Students will examine and evaluate physiological changes that occur to respiratory, cardiovascular and musculoskeletal systems during an acute bout of exercise and following a period of exercise training. The physiological basis of anaerobic and aerobic training and muscle training will be discussed. The

### Year 1 (6 credits)

Year 2 (6 credits)

Year 2 (6 credits)

Year 2 (6 credits)

environmental factors such as temperature and altitude that affect the responses to exercise will also be discussed. Students will participate in practical sessions held in the exercise physiology laboratory to assess their own anaerobic power, aerobic capacity, and isokinetic muscle strength.

Assessment: 100% coursework

#### **EXSC2006** Measurement of Physical Activity

The course aims to develop an understanding of how different aspects of physical activity are assessed. The primary focus of the course is on the objective measurement of physical activity and key areas covered include the measurement of energy expenditure, as well as cardiopulmonary and mechanical responses to physical activity of varying intensities.

Assessment: 60% coursework; 40% examination

#### **EXSC2007** Exercise Prescription and Training

This course will introduce the theoretical constructs underpinning exercise prescription and training and equip students with fundamental knowledge and skills to conduct basic pre-participation health screening, assess components of fitness and design exercise programmes on the basis of available scientific evidence for healthy individuals. This course will also contribute to prepare students for exercise professional accreditation, e.g. to become an American College of Sports Medicine (ACSM) certified personal trainer. Students will participate in practical sessions held in the fitness gym to undergo physical fitness testing and fitness training activities.

Assessment: 100% coursework

#### **EXSC2009** Exercise Biomechanics

This course will introduce you to the basic concepts of mechanics on the structure and function of the human movement. You will develop an understanding of the mechanical principles and rules that are governing motion. Examples and case studies from real life will be used to enhance your understanding of how the laws of mechanics can be applied so as to contribute to maintaining the health or even the performance of the individual/athlete.

Assessment: 100% coursework

#### Specialism Courses (Years 3 and 4)

Candidates are required to complete 24 credits from the Specialism Courses (i.e. EXSC3XXX) during Years 3 and 4.

Note: The Specialism Courses may be offered in alternate years. Students should check the course availability and course pre-requisite(s) carefully.

#### **EXSC3001** Internship

The internship is designed to give students first hand experience in the working environment relevant to sport, recreation, health and physical activity. Each student will be placed in an approved institution (120-150 hours in total) and will evaluate the appropriate skills and techniques utilized in specific settings.

# Year 2 (6 credits)

#### Year 2 (6 credits)

#### Year 3/4 (6 credits)

Year 2 (6 credits)

#### Assessment: 100% coursework

Remark: This course is not open for students from other curricula who have declared Major/Minor in Exercise Science.

#### EXSC3002 Advanced Exercise Physiology

This course will scientifically address the question "why exercise can result in the improvement of human health?" by providing an in-depth discussion on the latest discovered mechanisms that are responsible for the widespread health benefits of exercise, including the antioxidant, anti-inflammatory, anti-aging, anti-tumor, myokine/exerkine, cardioprotective, glucose-lowering and fat-beiging effects of exercise. This course will also explore the fundamental cellular and molecular mechanisms that underpin the physiological adaptations from exercise leading to the enhancement of human health.

Co-requisite: EXSC2003 Exercise Physiology Assessment: 100% coursework

Remark: This course is replaced by EXSC3018 with effect from the 2019-20 academic year.

#### **EXSC3003** Advances in Skill Learning

The course will introduce students to an in depth examination of both theoretical and applied aspects of skill learning. Students will trace the development of the field, from the early work in psychology and sport science through to contemporary developments in movement rehabilitation. A significant component of the course will be dedicated to experimental work, with students expected to develop and test empirically their own hypotheses.

Assessment: 100% coursework

#### **EXSC3004** Physical Activity and Disability

The course will present both concepts and trends in the area of adapted physical activity, enabling students to become familiar with theoretical and practical perspectives on physical activity provisions and opportunities for people with disabilities. This course will also provide an overview of the relationship between physical/psycho-social health and physical activity in people with disabilities.

Assessment: 100% coursework

#### **EXSC3005** Physical Activity and Diseases of Inactivity

Obesity is emerging as one of the greatest threats to world public health. Obesity and several other serious diseases (coronary heart disease, diabetes, osteoporosis and some cancers) all have one thing in common - they are associated with physical inactivity. This course will examine the physiological bases upon which physical inactivity leads to disease and evaluate the role physical activity plays in the prevention and treatment of lifestyle diseases. An introductory knowledge of physiology is highly recommended.

Assessment: 100% coursework

## Year 3/4 (6 credits)

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#### Year 3/4 (6 credits)

### EXSC3006 Public Health Promotion of Physical Activity

This course primarily looks at how physical activity could be used as a tool for public health promotion, and the concepts and methods behind the utility of physical activity in public health settings. In this course, we will discuss about the distributions of physical activity and physical inactivity in the population, and whether or not the distributions are related to health and illnesses. Using research evidence, we attempt to scientifically evaluate the effectiveness of physical activity interventions, and review how the results may help inform national and international policy targeting physical activity promotion.

Assessment: 70% coursework; 30% examination

## EXSC3007 Special Topics in Exercise Sciences

This course introduces the students into a current topic that is of special interest to the field of Exercise Sciences. The course focuses on a target article written by a leading expert in the field of exercise sciences. Instead of learning the facts, student will learn to form an educated opinion on the topic, both orally and in writing. To this end, students will conduct short literature searches to enhance their understanding of the key concepts that underlie the topic, may acquire specific data collection techniques and/or complete empirical data collection.

Assessment: 100% coursework

# EXSC3008 Recent Advances in Exercise and Health

Students taking this course will be given an overview of recent advances in the field of Exercise and Health. The course will normally focus on one specialist area that will provide students with detailed learning opportunities that may involve combinations of lectures, seminars, labs, empirical data collection, student presentations and other learning experiences. When offered, the specialist area of this course may change from year to year.

Assessment: 100% coursework

# EXSC3009 Current Concepts in Exercise and Health

This course introduces students to a current concept that is relevant to the discipline. Students will seek to develop their own opinion of the current concept by conducting an in-depth literature search, acquiring an understanding of the specific data collection and analysis techniques relevant to the concept and/or completing empirical data collection. Students are encouraged to choose a concept that aligns with their final year dissertation.

Assessment: 100% coursework

# EXSC3010 Advanced Measurement of Physical Activity

The course develops a critical appreciation of the measurement of different aspects of physical activity. The course will present measurement within the context of a research project, with particular emphasis on current gold-standard means of data collection. Various measurement techniques and their

#### Year 3/4 (6 credits)

application will be presented and may include the measurement of human movement, energy expenditure, muscle and neural function.

Assessment: 100% coursework

### EXSC3011 Advanced Exercise Prescription and Training

The course provides students with an in-depth understanding of the essence of exercise prescription and training which includes knowledge of, and skill in, risk-factor and health-status identification, fitness appraisal, exercise programme design and implementation. Key areas covered include physical fitness assessments, interpretation of assessment results, exercise prescription and training in apparently healthy individuals, patients with chronic diseases and special populations.

Pre-requisite: EXSC2007 Exercise Prescription and Training Assessment: 60% coursework; 40% examination

#### **EXSC3012** Applied Anthropometry

This course introduces students to the theoretical and practical skills of anthropometry, the study of human body dimensions and composition. Students will aim to acquire practice and theoretical competency at the internationally accredited ISAK Level 1, and be able to apply this information to physical activity, health and dietary/nutrition-related situations.

Assessment: 70% coursework; 30% examination

#### **EXSC3013** Sport and Exercise Nutrition

This course will introduce the basic principles of human nutrition and the functional role of nutritional components such as water/fluid, vitamins, minerals, carbohydrate, fat and protein for health and exercise performance. Students will be exposed to effective nutritional practices that assist with weight management and/or positively influence exercise performance, according to available scientific evidence. Students will participate in learning activities to apply nutrition knowledge in real-life scenario.

Mutually exclusive: EXSC3017 Nutrition for Exercise and Health Assessment: 100% coursework

### **EXSC3014** Rehabilitation Science

This course will present both theoretical perspectives and applied aspects of rehabilitation science. Students will study human functional capacity as it relates to deficits of neuromuscular, cardiovascular and respiratory mechanisms that underlie functional disability. Emphasis is placed on the application of fundamental theoretical principles to enhance human performance and quality of life of persons with movement difficulties in dynamic environments.

Prerequisite: Pass in any one of the following courses: EXSC2003 Exercise Physiology, EXSC2008 Physical and Health Benefits of Exercise Assessment: 100% coursework

#### Year 3/4 (6 credits)

Year 3/4 (6 credits)

#### Year 3/4 (6 credits)

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#### EXSC3015 Sport and Exercise Psychology

#### Year 3/4 (6 credits)

This course primarily looks at the psychological aspects of exercise and health behaviours. The content will cover different models of psychology that have been used for explaining and intervening exercise and health behaviours among diverse populations. In addition, the course reveals the role of exercise and physical activity on mental health/illnesses and psychological well-being. Students will explore the assessment and research methods of psychology to evaluate psychological factors of exercise and health behaviours. Mental skills training and counselling techniques useful for fostering behavioural adherence towards exercise and other health enhancing behaviours will be demonstrated. Students will be given opportunities to develop evidence-based behavioural change strategies and intervention programmes based on psychological principles for the promotion of physical activity and health behaviours.

Mutually exclusive: EXSC2002 Sport and Exercise Psychology, EXSC3016 Psychology of Exercise and Health Assessment: 100% coursework

Remark: This course is equivalent to EXSC2002 Sport and Exercise Psychology.

#### EXSC3018 Biological Basis of Exercise and Health (6 credits)

This course will address the question "why exercise can result in improvement of human health?" by providing an in-depth discussion on the latest discovered biological mechanisms that are responsible for the widespread beneficial effects of exercise on health, including the anti-inflammatory effect, antioxidant effect, myokines, cardioprotective effect, fat-beiging effect, glucose-lowering effect, anti-cancer effect, and brain health effect of exercise. This course will also explore the fundamental cellular and molecular mechanisms that underpin the physiological adaptations from exercise leading to the enhancement of human health. Students will participate in practical sessions held in the laboratory to assess their own body fat and glucose tolerance.

Assessment: 100% coursework

Remark: This course is equivalent to EXSC3002.

#### EXSC3019 Exercise and Chronic Diseases (6 credits)

Exercise and chronic diseases course will introduce you to the prevention, rehabilitation and management of the chronic conditions in which exercise can play a vital role. You will be able to understand the most effective way to change the behaviour of an individual regarding exercise and how to design safe and effective exercise programmes for individuals with chronic diseases. You will be exposed to clinical case scenarios with the primary objective to develop the skills in evidence-based practice.

Assessment: 100% coursework

#### **Capstone Experience** (Year 4)

Students are required to complete a 12-credit dissertation in Year 4.

#### **EXSC4000** Dissertation

#### Year 4 (12 credits)

The dissertation is a capstone requirement of the BSc (Exercise & Health) programme and is an opportunity for students to undertake a significant independent piece of research work; to build and demonstrate knowledge and research skills in a particular sub-discipline of physical activity and exercise science, and to show the ability in writing in the normal academic style of a journal article. Students taking the dissertation should have already completed a statistics course.

Pre-requisite: Pass in a statistics course Assessment: 100% coursework

#### MINOR IN EXERCISE SCIENCE (36 credits)

Candidates from other Faculties who wish to minor in Exercise Science, are required to successfully complete 36 credits, comprising:

- 12 credits of Compulsory Courses (EXSC1001 & EXSC1002)
- 24 credits of Subject Core Courses and Specialism Courses (EXSC2xxx & EXSC3xxx)

#### LANGUAGE ENHANCEMENT COURSES (Years 1 and 2)

English Language Enhancement

#### CAES1000 Core University English

#### Year 1 (6 credits)

(Candidates who have achieved Level 5<sup>\*\*</sup> in English Language in the Hong Kong Diploma of Secondary Education Examination, or equivalent, are exempted from this requirement and should take a 6-credit elective course in lieu.)

The Core University English (CUE) course aims to enhance first-year students' academic English language proficiency in the university context. CUE focuses on developing students' academic English language skills for the Common Core Curriculum. These include the language skills needed to understand and produce spoken and written academic texts, express academic ideas and concepts clearly and in a well-structured manner and search for and use academic sources of information in their writing and speaking. Four online-learning modules through the Moodle platform on academic speaking, academic grammar, academic vocabulary, citation and referencing skills and understanding and avoiding plagiarism will be offered to students to support their English learning. This course will help students to participate more effectively in their first-year university studies in English, thereby enriching their first-year experience.

Assessment: 100 % coursework

#### CAES9723 Academic English for Exercise&Health Students

#### Year 2 (6 credits)

This one-semester, 6-credit course will provide the opportunity for Exercise & Health students to communicate effectively in work situations which entail the use of oral and written English. Students are required to identify an issue relevant to their discipline and undertake a small scale research project to investigate the problem issue. During the process, students need to gather data by means of an

interview, perform analysis on any information they obtain, and present their findings orally and in formal report writing. The context within which they conduct the project should be a company that is connected with the provision of exercise and health products, sporting facilities or services.

Assessment: 100% coursework

Chinese Language Enhancement

#### CEDU9006 Practical Chinese for BSc (Exercise & Health) Students Year 3 (6 credits)

The main objective of this course is to promote the professional use of the Chinese language in the field of Exercise Science. It aims at helping students to master the skills of letter writing, email writing and target-oriented proposal writing in their profession. In the Chinese characters component, there are drilling practices to familiarize the students with the frequently used terms in their simplified forms. Special emphasis is given to presentation skills.

Assessment: 50% coursework; 50% written examination

Remark: This course is equivalent to CEMD9008 Practical Chinese for Biomedical Sciences Students.

**CUND9002 Practical Chinese and Hong Kong Society** (for students from the Mainland, and the medium of instruction is Putonghua)

This course is specifically designed for the students from the Mainland. With Putonghua as the medium of instruction, it aims to underscore the characteristic styles and formats of practical Chinese writings in the workplace context in Hong Kong. Topics addressing the rhetorical strategies for reader-oriented professional writings are included to strengthen the students' command of the language. In the "Chinese Characters" component, drilling practices provide ample opportunity for the students to learn to convert simplified characters into their traditional forms. The evolution of Cantonese and the lexical and phonetic systems of this dialect will be explored. The local history and culture of Hong Kong will also be considered. On-site visits are organized to deepen the students' understanding of local traditions and, more importantly, to enhance their ability to appreciate and accept cultural and regional differences.

Assessment: 50% coursework; 50% examination

#### **CUND9003** Cantonese for Non-Cantonese Speaking Students (for students from the Mainland, and the medium of instruction is Putonghua)

(6 credits)

(6 credits)

Through a comparative analysis of Putonghua and Cantonese, this course enables students to learn the characteristics of Hong Kong Chinese, to discover the differences in vocabulary and expression between the Cantonese dialect and Mandarin, to strengthen their communication skills in everyday life, and to have a proper understanding of the culture, traditions and people in Hong Kong.

Assessment: 60% coursework; 40% examination

### COMMON CORE CURRICULUM (36 credits)

Candidates are required to complete 36 credits of courses in the Common Core Curriculum, comprising at least one and not more than two courses from each Area of Inquiry with not more than 24 credits of courses being selected within one academic year, except where candidates are required to make for

failed credits.

# ELECTIVE COURSES AND/OR MINOR(S) (90 credits)

Candidates are required to complete 90 credits in elective courses, which may include courses within the curriculum and/or minor(s) offered in other curricula.