REGULATIONS FOR THE DEGREE OF MASTER OF SCIENCE IN SPORTS SCIENCE (MSc[SportsScience])

(See also General Regulations)

Any publication based on work approved for a higher degree should contain a reference to the effect that the work was submitted to the University of Hong Kong for the award of the degree.

Ed171 Admission requirements

To be eligible for admission to the courses leading to the degree of Master of Science in Sports Science, candidates shall

- (a) comply with the General Regulations;
- (b) hold
 - (i) either a Bachelor's degree with honours of this University preferably with a major in sports science, human movement, physical education, sports coaching, sports administration, recreation or leisure management; or a related-degree acceptable to the Admissions Committee; or
 - (ii) from another university or comparable institution accepted for this purpose; and
- (c) satisfy the examiners in a qualifying examination, if required.

Ed172 Qualifying examination

- (a) A qualifying examination may be set to test the candidates' formal academic ability or their ability to follow the courses of study prescribed. It shall consist of one or more written papers or their equivalent and may include a project report.
- (b) Candidates who are required to satisfy the examiners in a qualifying examination shall not be permitted to register until they have satisfied the examiners in the examination.

Ed173 Award of degree

To be eligible for the award of the degree of Master of Science in Sports Science, candidates shall

- (a) comply with the General Regulations; and
- (b) complete the curriculum and satisfy the examiners in accordance with the regulations set out below.

Ed174 Length of curriculum

The curriculum shall extend over two academic years of part-time study. Each year of study shall consist of two semesters.

Ed175 Completion of curriculum

To complete the curriculum, candidates shall

- (a) follow instruction on the syllabuses prescribed and complete all specified work as required;
- (b) satisfy the examiners in all forms of assessment as may be required;
- (c) complete and present a satisfactory dissertation on an approved subject.

Candidates shall be required to pass all written assignments and examinations and practical work required in the first year before progressing to the second year.

Ed176 Dissertation

- (a) The title of the dissertation shall be submitted for approval not later than March 1 of the final year of study and the final dissertation shall be submitted not later than September 1 of the same year.
- (b) Candidates shall submit a statement that the dissertation represents their own work undertaken after registration as candidates for the degree.
- (c) The examiners also may prescribe an oral examination on the subject of the dissertation.

Ed177 Examinations

- (a) An assessment of the candidates' performance during the year, may include written assignments, tests, laboratory and practical work as prescribed by the course.
- (b) Candidates who have failed to satisfy the examiners in any part of the examinations at the first attempt may be permitted to present themselves again for examination at a time to be determined by the Board of Examiners; or such candidates may be recommended for discontinuation of studies under the provisions of General Regulation G 12.
- (c) Candidates who have presented a dissertation which has failed to satisfy the examiners at the first attempt may be permitted to revise and re-present the dissertation within a period to be determined by the Board of Examiners; or such candidates may be recommended for discontinuation of studies under the provisions of General Regulation G 12.
- (d) A list of the successful candidates shall be published. Candidates who have shown exceptional merit may be awarded a mark of distinction, and this mark shall be recorded on the candidates' degree certificate.

SYLLABUSES FOR THE DEGREE OF MASTER OF SCIENCE IN SPORTS SCIENCE*

Candidates are required to complete a total of 16 modules, consisting of ten core modules, an elective module and a five module dissertation.

CORE MODULES

Candidates are required to complete all core modules.

MSSS6004. Peak performance (2 modules)

The course will examine primarily psychological factors that influence peak performance in sport, providing students with an opportunity to explore the effective translation of theory to practice. Topics to be covered will include one dimensional and multi-dimensional approaches to the anxiety/performance relationship, emotion control, principles of skill acquisition and motivational aspects of peak performance, as well as fundamental biomechanics and the science of coaching.

^{*} Subject to University's approval

MSSS6005. Physical activity and health (2 modules)

This course explores the interplay between physical activity and health using a multi-disciplinary approach. Biophysical, socio-cultural and environmental antecedents of physical activity are explored. The influence physical activity has upon the health of various sections of our population is considered in light of current published evidence, alongside an understanding of various approaches designed to change physical activity behaviour.

MSSS6006. Exercise physiology (1 module)

This module will investigate factors that limit performance in physical exercise, concentrating on the respiratory, cardiovascular and cellular mechanisms. Topics also include possible mechanisms that lead to fatigue (peripheral and central factors) and the reported actions of ergogenic aids in enhancing performance.

MSSS6007. Research methods I (1 module)

Students will learn to develop research ideas and problems by formulating research questions and hypotheses, conduct extensive literature searches using a wide range of resources and become more confident in writing and presenting a literature review. Students will learn the different types of, and major differences research designs. Students will also be become familiar with reading, understanding and critically evaluating journal articles in the sport science field. By the end of the course, students will know how to formulate method, conduct a small research project, understand ethical issues in research, and critically evaluate and appropriately report on the general literature in sport science.

MSSS6008. Rehabilitation and motor learning (1 module)

The module will introduce students to both applied and theoretical issues in rehabilitation, with particular emphasis on the implications of contemporary theories of motor learning and skill acquisition for rehabilitation. A significant component of the module will include discussion and examination of the translation between theory and practice in rehabilitation, with some field work required.

MSSS6009. Sports nutrition (1 module)

This module will examine important concepts of sports nutrition, including an overview of the biochemical pathways used in human metabolism and the role they play in exercise. Topics are likely to include the nutritional requirements during training and competition; role of nutrients before, during and after exercise; nutritional analysis (software), and nutritional supplements (ethics, effectiveness, safety).

MSSS6010. Research methods II/Statistics (1 module)

Students will learn how to handle data, understand the use of statistics in research and become conversant with analytical concepts and a wide range of statistical methods. Primarily, students will learn the different types of sampling procedures, learn how to appropriately select a sample on which a study is conducted, and be introduced to the concepts of reliability, validity and objectivity. The course will summarize the basic statistics used in describing data, such as distributions, measures of central tendency, and measures of variation. Students will also become acquainted with correlation techniques, techniques for comparing treatment effects as well as non-parametric techniques and qualitative approaches to research. The course will involve a significant amount of practical work on computers.

MSSS6011. Research techniques (1 module)

This module will provide specialist training in research techniques for the sport sciences, including physiological assessment and measurement techniques, experimental psychological procedures and motion analysis data capture principles. Students will specialize in techniques relevant to the topic of their dissertation.

ELECTIVE MODULE

Candidates are required to complete one elective module from a list determined yearly that may include:

MSSS6401. Biomechanics (1 module)

This module will study the mechanics of movement, reviewing basic kinematics of motion, and their application to sport and exercise. Topics will include fundamental musculo-skeletal biomechanics, advanced biomechanical analysis, biomechanics of sports and biomechanics of injury.

OR

MSSS6403. Children's health and physical activity (1 module)

This module examines child growth and development and its relationship with physical activity and performance. Topics may include: the growing body – body proportions, body composition, growth and maturation; physical activity patterns and their assessment; muscular strength and power; cardiorespiratory performance; anaerobic performance; training and exercise prescription in children.

OR

MSSS6405. Clinical exercise physiology (1 module)

This course will explore the application of exercise physiology to clinical populations. Various topics will be covered including: fundamentals of clinical exercise testing; quality measurement and emergency procedures; the testing environment. Testing and training in a variety of clinical groups will be considered such as the pulmonary disease patients, cardiac disease patients, obese patients, cancer patients.

OR

MSSS6406. Sports injuries (1 module)

This module will focus upon the prevention and treatment of injury in sport. Topics covered will include patterns of injury in sports, injury for specific populations, injury treatment and rehabilitation techniques and programme design for injury prevention.

DISSERTATION REQUIREMENT

MSSS8999. Dissertation (5 modules)

Candidates are required to complete a dissertation on an approved topic arising from the field of study.