

**PERM 3015 Recreation Programming and Event Management (3,3,0)**

Prerequisite: PERM 2016 Theory and Practice in Physical Education and Recreation

This course introduces students to theories, principles and practices of recreation programming and event management. It aims to (1) develop students' programming and event management skills through practical exercises; and (2) help students acquire an understanding of the processes and procedures entailed in planning, designing and delivering of recreation programmes and running of events.

**PERM 3016 Fitness and Recreation for Selected Population (3,3,0)**

This course discusses the benefits of exercise, exercise delivery methods and methods of assessing fitness of persons with physical disabilities, intellectual disabilities and older adults. It enables students to (1) evaluate and identify the health fitness and recreational programme needs of selected population; (2) understand the benefits of exercise for selected population and administer and interpret life-style inventory; and (3) plan and implement the activity programme for the special population.

**PERM 3017 Health Fitness Evaluation and Assessment (3,3,1)**

Prerequisite: PERM 1006 Human Anatomy and Physiology  
The course covers fundamental knowledge about the laboratory and field assessment of various health fitness components. In addition, students will gain practical experiences of fitness assessment that are essential to the understanding of the procedure of selected tests. The course aims to (1) enable students to understand both the laboratory and field assessment of various health fitness components; (2) provide students with practical hands-on experiences for such assessment; and (3) enhance students' ability to interpret health fitness testing results.

**PERM 3025 Kinesiology (3,3,0)**

This course is to introduce basic knowledge on biomechanical information required in performing human movement and exercise as well as in the analysis of human movement. Upon completion of the course, students should be able to (1) acquire the basic biomechanical information necessary for adequate assessment, description, and analysis of human movement and exercise; (2) possess practical laboratory experience to assess fundamental mechanical concepts; and (3) apply the application of these principles in physical and recreational activities.

**PERM 3026 Nutrition and Health (3,3,0)**

This course is to provide students with basic nutritional principles and practice as related to health as well as nutrition as related to sports. In addition, students will examine the importance of nutrition throughout life cycle and the problems people facing about nutrition in the modern society.

This course enhance students' understanding of macro and micro-nutrients and their effects on people's health; to understand principles and practice of healthy diet; to comprehend dietary needs throughout life cycle; to understand nutritional needs of athletes and nutritional aids for sport performance; to apply nutritional concepts for weight management; to discuss nutritional issues facing today's society.

**PERM 3027 Prevention and Care of Sports Injuries (3,3,0)**

Prerequisite: PERM 1006 Human Anatomy and Physiology  
This course covers basic knowledge on the mechanism, types, prevention and treatment of sports injuries of major joints in human body. Upon completion of the course, students should be able to (1) identify the basic classification of sport injury etiology and mechanisms; (2) demonstrate the skills of proper prevention and handling of sports injuries; and (3) have a solid understanding of indications and contraindications of treatment.

**PERM 3035 Public and Community Recreation (3,3,0)**

The course covers the updated community recreation development in Hong Kong. The structure, roles and functions of government, voluntary and private sectors will be explored globally and locally. The course aims to (1) enhance students' understanding of how different leisure service providers operate to meet the diverse needs and demands of individuals, families, and societies; (2) help students to appraise the professional recreation management practice and the fundamental forms of the activities promoted and developed as public and community recreation; (3) help students to appreciate a range of social and institutional forces that impact on our leisure; (4) introduce to students different approaches in the management of recreation; (5) develop students' understanding of the roles of recreation and leisure in our society (e.g. social control, for individual and community/social benefits); and (6) increase students' awareness of individual and social problems associated with recreation and leisure.

**PERM 3037 Motor Learning and Development (3,3,0)**

This course covers fundamental knowledge about motor learning and motor development throughout the life span. Students can apply the knowledge in laboratory section and service learning. The course enables students to (1) understand the fundamental motor skill development from babyhood to adolescence; (2) trace the path of human perceptual-motor development throughout the life span; (3) be acquainted with the process of how learning and performance of motor skill occur; and (4) discuss the implications and applications of the general principles and concepts of motor learning.

**PERM 4005 Facility Management (3,3,0)**

The course covers the fundamental knowledge of planning and management of sports facilities. It teaches students the resources management, design and building requirements as well as safety and risk management required for outdoor and indoor sport facilities. Upon completion of the course, students should be able to (1) understand the structures and space necessities for planning facilities; (2) learn the basic steps of planning process and understand the objectives and needs affecting sports facility planning; and (3) understand all the major issues involved in planning, funding, tendering, design, building and management of sports facilities.

**PERM 4006 Financial and Human Resources Management in Leisure Services (3,2,1)**

Prerequisite: PERM 2006 Organization and Administration in Physical Education and Recreation

This course provides students with the fundamental concepts and skills related to the management of financial and human resources. It also gives them opportunities to apply such knowledge and skills to solve management issues in mock sport and leisure settings.

This course enables students to understand the fundamental concepts on how financial and human resources are managed and utilized effectively in an organization; to enable students to obtain experience in the practical aspects of problem-solving and decision making techniques used to manage financial and human resources in leisure services.

**PERM 4007 Leadership and Communication in Sport and Recreation (3,3,0)**

This course introduces students to recreation leadership concepts and theories. It also provides students with an understanding of communication theories and processes related to public and interpersonal communication. The course offers students opportunities to practice their leadership and communication skills in sport and recreation settings.

This course enables students to acquire an understanding of the basic leadership theories, models and approaches; to be familiar with the processes of activity leadership; to be able to apply leadership skills and strategies learned in the course in leading sport and recreation activities; to develop an understanding of conflict negotiation and decision-making skills; to understand

concepts, models and theories of public and interpersonal communication; to be able to apply public and interpersonal communication concepts and theories to analyse their own, interpersonal, and group behaviors; to enhance their team building and leadership skills; to improve their written and oral communication skills relevant to sport and recreation.

**PERM 4015 Marketing in Leisure Services (3,2,1)**

Prerequisite: PERM 2006 Organization and Administration in Physical Education and Recreation

The course covers the fundamental marketing knowledge of sport and recreation and its applications in the Western and Chinese sport industry. Upon completion of the course, students should be able to (1) understand the differences between services and physical product; (2) identify the role of marketing in leisure and sport services; and (3) apply the marketing knowledge in leisure and sport services.

**PERM 4016 Outdoor Recreation (3,3,0)**

Prerequisite: PERM 1317 Outdoor Pursuits

This course is to introduce fundamental knowledge and issues in outdoor recreation as well as in leading recreation activities. Upon completion of the course, students should be able to (1) comprehend the fundamentals of outdoor recreation; (2) understand the nature and outdoor resources for recreation; and (3) acquire essential skills to be leaders in outdoor recreational activities.

**PERM 4017 Principles and Practice of Exercise and Weight Management (3,3,0)**

This course introduces students to the scientific principles underlying the design of weight management programmes. It also provides students with an understanding of the obesity issues. It enables students to: (1) understand the health risks and the etiology of obesity; (2) introduce exercise prescription and intervention to combat obesity; and (3) understand the issue of obesity and weight control in physiological, sociological, and psychological context.

**PERM 4895 Honours Project (3,\*,\*)**

Prerequisite: PERM 3006 Research Methods

This course is a required project for all BA (Hons) in Physical Education and Recreation Management students. Students will pursue in-depth research on a specific topic of interest to the student under the guidance of appointed lecturers from the Department offering the course. Students are to consult with their advisers regarding the necessary field study, experimentation, library or archival research required, and how best to integrate this into their Honours Project.

This course enables students to initiate, conduct and write-up a research project in the physical education and recreation management field; to integrate the professional skills which have been taught in the preceding two years with specific application to a topic to produce a well-argued and documented report.

**PHYS 1005 Introduction to Physics and Energy Science (3,3,0)**

This course introduces some basic concepts of physics with emphasis on real-life examples, in particular applications in energy science. It explores the fundamental physical principles in the workings of everyday objects and natural phenomena, everyday objects and the processes of energy conversion and usage.

**PHYS 2005 Heat and Motion (3,3,0)**

Prerequisite: PHYS 1005 Introduction to Physics and MATH 1005 Calculus or consent of instructor

This course covers classical mechanics and thermodynamics pertaining to energy science applications. The concepts and theory of Newtonian mechanics will be introduced followed by applications to rigid body motions, wave propagation, and fluid dynamics. After presenting the laws of thermodynamics,

the energy flow and energy conversion mechanisms in various thermodynamic processes will be examined.

**PHYS 2006 Electricity and Magnetism (3,3,0)**

Prerequisite: PHYS 1005 Introduction to Physics and MATH 1005 Calculus or consent of instructor

This course introduces the basic concepts of electricity and magnetism as applied to energy technology fields. Topics include electrostatics, circuits, induction, motors, generators, alternating currents, transformers, electromagnetic waves and optics.

**PHYS 2007 Mathematical Methods for Physical Sciences (4,4,0)**

Prerequisite: MATH 1005 Calculus or consent of instructor

This course provides students with the necessary mathematical knowledge in preparation for studying further courses in physical sciences. It illustrates the use of mathematics in physical sciences context so that students can apply their math skills in a practical situation.

**PHYS 2008 Green Energy Laboratory I (1,1,0)**

Co-requisite: PHYS 2005 Heat and Motion or consent of instructor

By way of lectures and a series of experiments related to principles and application of energy science, this practical course introduces Year 2 students to the basic concepts and methodologies behind experimentation and energy science.

**PHYS 2009 Green Energy Laboratory II (1,1,0)**

Prerequisite: PHYS 2005 Heat and Motion or consent of instructor

Co-requisite: PHYS 2006 Electricity and Magnetism or consent of instructor

By way of a series of Green Energy experiments, this practical course introduces Year II students to the basic concepts and methodologies behind Green Energy.

**PHYS 2015 Guided Study in Physics and Energy Science I (3,0,0)**

This course is part of an elite undergraduate study program supervised by a faculty member in the Physics Department. The goal is to prepare the student for advanced studies and research in physics and energy science. Examples of topics include electrodynamics, statistical physics, materials science, electronic instrumentation, spectroscopy, and nuclear physics and technology. The student should accomplish one of the following. (1) Research on a non-textbook problem, (2) acquire a research skill, (3) learn how to use a research tool, or (4) study an advanced subject in depth. The student must submit a written report at the end of the semester.

**PHYS 2115 Electronics (3,3,0)**

Prerequisite: PHYS 1005 Introduction to Physics or consent of instructor

This course provides students with basic concepts of electronic circuits. Foundation concepts in both dc and ac circuit analysis will be introduced. Next, the behaviours and applications of solid state electronic devices, including diodes and transistors will be examined. The last part covers power electronics and techniques to control the flow of electrical energy between the source and the load. This course builds a foundation upon which further work in electronics and instrumentation are based. The course includes a lab-based tutorial component which gives students hand-on experience.

**PHYS 3005 Atomic and Nuclear Physics (4,4,0)**

Prerequisite: PHYS 2005 Heat and Motion or consent of instructor

This course begins by introducing the key concepts of quantum physics including the wave-particle duality, the Heisenberg uncertainty principle and the Schrödinger equation. Using the language of quantum physics, students will then explore the structure and properties of atoms and nuclei. This course