

## **FACULTY OF EDUCATION**

### **BBED3001 Catering for diverse learning needs (6 credits)**

Mainstreamed schools face many challenges today especially in light of the inclusion movement as practiced in many developed countries or under the integrated education policy actively launched by the Government in Hong Kong since 1997. This course investigates major areas of disability and impairment. Particular emphasis will be given to learning disabilities (or specific learning difficulties), intellectual disabilities, autistic spectrum disorder, physical disabilities and giftedness. The impact of exceptionalities on learning will be examined. Family empowerment and collaborative teamwork are essential prerequisites in facilitating effective intervention on children with disabilities. Attention will be made on teachers' pedagogical knowledge and strategies in order to help children with diverse needs realize their potential in regular and/or special education settings. Controversial special education issues will also be addressed.

100% continuous assessment by coursework: a range of assessment tasks will be used which include issue-based problem-solving work, Individual Education Plan (IEP) and reflective essay paper.

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### **BBED4001 Social and philosophical foundations of education (6 credits)**

This course examines educational problems from the perspectives of classic and contemporary figures in sociology and philosophy. These two disciplines play complementary roles in clarifying both the conceptual foundations and the empirical assumptions that serve as the foundation of much debate over the means and ends of education. Students will engage deeply with major texts in these two fields and apply them to problems currently facing educators in Hong Kong and the rest of the world.

100% continuous assessment by coursework: the course would employ a range of teaching and learning activities, and assessment tasks. They include analysis of selected issues, student presentation, and/or discussion in class and e-forum.

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### **BBED4002 Understanding and guiding whole-person development (6 credits)**

(Not to be taken with EDUC2002)

This course reviews major theories, concepts and research on child development and behaviour, and examines ways of guiding, counselling and supporting children in their whole-person development in school settings. The course will address: (i) major theories of child development; (ii) the interdependency of all aspects of development, i.e. physical, cognitive, academic, career and personal-social, and social relationships; (iii) basic concepts and strategies in developmental, preventive and remedial guidance; (iv) the roles of teachers in student guidance and counselling; and (v) the application of counselling skills with Hong Kong students.

100% continuous assessment by coursework.

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### **BSIM3001 Information management foundations (6 credits)**

This course introduces the literature of librarianship and information management and provides an overview of the properties of information and knowledge, the information landscape and the historical, current, and potential roles of libraries and information agencies. Information process models will be analysed to surface key issues in the transfer of information, and demonstrate the relationship between information processes such as collection, organisation, access, and delivery of information. Approaches to needs analysis will be explored.

Assessment: 100% coursework.

### **BSIM3004 Information retrieval (6 credits)**

This course introduces and explores information retrieval principles, techniques and strategies applied to electronic information sources, methods for evaluating databases, and information literacy frameworks. Information literacy issues including the nature of information, the nature of the autonomous learner and user needs, information seeking behavior, mediated searching, and evaluation of retrieved information are discussed. At the completion of this course, participants will have an enhanced understanding of information literacy, and improved information seeking ability, and understanding of mediated search provision.

Assessment: 100% coursework.

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### **BSIM3006 Knowledge management (6 credits)**

This course provides an introduction to knowledge exchange theory, issues and developments. Human elements relating to organizational culture and learning are the focus for examining models for knowledge creation, taxonomies and sharing. Change management, communities of practice and decision-making are explored. Technical elements relating to electronic tools and platforms such as groupware, document management, intranets, customer relationship management and the use of information and communication technologies will be examined.

Assessment: 100% coursework.

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### **BSIM3010 Digital libraries: principles and applications (6 credits)**

This course focuses on research and development issues in digital libraries; access strategies and interfaces; metadata and interoperability; economic and social policies and management and evaluation.

Assessment: 100% coursework.

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### **BSIM3014 User-based systems analysis (6 credits)**

This subject introduces students to the evaluation and design of information systems in the context of information agencies. Technologies of networking and databases will be examined with an emphasis on usability and internal and external human factors. Mapping technology planning to organizational functions and goals as well as human-computer interactions will be discussed.

Assessment: 100% coursework.

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### **BSIM3017 Database systems (6 credits)**

This course aims to introduce fundamental concepts of database management systems, with an emphasis on the relational database model and applications in information agencies. Topics include the motivation for database systems, conceptual and implementation data models, data modeling, principles of database design, data definition and manipulation languages. Support for procedural database objects in Structured Query Language (SQL) is also introduced.

Assessment: 60% coursework and 40% examination.

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### **BSIM3021 Web development, users and management (6 credits)**

This course covers basic principles of web design and development from technical, user and management perspectives. It aims to develop an appreciation of web-related technologies and user

behaviour in such environments and of best practice in the creation, organisation and maintenance of such sites through studying and practising relevant theories.

Assessment: 100% coursework.

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### **BSIM3023 Information organisation and content management (6 credits)**

This course examines the theories and approaches for information organisation and content management in libraries and other environments. Basic concepts and theories of metadata together with a number of metadata schemas and standards for representing, retrieving and organising information and content in various applications are introduced. The emphasis is on the design and implementation of metadata applications for information organisation and content management in digital and web-based environments.

Assessment: 100% coursework.

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### **BSIM4012 Records management (6 credits)**

This course introduces the basic concepts, approaches, and standards for records management. The emphasis is on activities and methods relevant to storage, filing, retrieval, retention, preservation, and disposition of physical and electronic records, with legal and ethical considerations. Techniques and strategies to establish organization-wide records management programs for information and knowledge repository are also examined.

Assessment: 100% coursework.

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### **BSIM4018 Data warehousing and data mining (6 credits)**

This course aims to introduce the challenges and solutions of discovering and extracting organizational information from heterogeneous sources through the use of data warehousing and data mining techniques. Topics include the motivation for and the processes of data warehousing, data warehouse architecture and design, online analytical processing, as well as concepts and techniques of data mining. Ethics and personal privacy issues in data mining are also addressed.

Assessment: 100% coursework.

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### **BSIM4020 Information society issues and policy (6 credits)**

The course examines the link between information society issues and the need for information policies that address these issues. Issues including intellectual property rights and copyright, privacy and freedom of access to information, information and culture, technology and culture, and societal needs and demands for information are explored. Information policies and the policy development process are addressed at macro and micro levels. At the completion of this course, participants will be able to identify the need for information policies, critique existing information policies, and develop information policies at the organizational level.

Assessment: 100% coursework.

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### **EDUC1001 Language and learning (6 credits)**

(Not to be taken with EDUC1003)

This course explores the nature, organization and functioning of language itself, as our primary meaning-making resource. It covers language development in children, the role of language in learning, at home and in school, the challenges of mastering literacy, the linguistic component in

educational knowledge, language across the curriculum, the language and genres of specific school subjects, and academic genres at tertiary level and beyond.

Assessment: 100% coursework.

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### **EDUC1002 Hong Kong education: Systemic features and social approaches (6 credits)**

After studying the course, students will be able to identify, understand and analyze major features underlying the Hong Kong educational system, their development trends and the social factors contributing to the formation of these systemic features. In particular, they are expected to be able to: master basic facts and structural features of the Hong Kong education system such as modes of educational financing; grasp the general picture of recent education and curriculum reforms in response to social change including globalization; and employ sociological perspectives to analyze and explain the complexity of selected educational issues that confront both teachers and students in their historical, cultural and contemporary contexts, such as education and socialization, equal educational opportunity and social stratification, school as social organization, school-based management, and teacher professionalism and professionalization.

Assessment: 100% coursework.

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### **EDUC1003 Language and learning: From birth to adolescence (6 credits)**

(Not to be taken with EDUC1001)

This course explores the nature, organization and functioning of language itself, as our primary meaning-making resource. From the stages of birth to adolescence, it covers language development in children, the role of language in learning, at home and in school, the challenges of mastering literacy, the linguistic component in educational knowledge, language across the curriculum, the language and genres of specific school subjects in basic education.

Assessment: 100% coursework.

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### **EDUC2001 Psychology of teaching and learning (6 credits)**

This course examines a broad range of issues involved in the process of teaching and learning. It is designed to develop students' understanding about the impact of different aspects (e.g., social, cognitive, and affective) of the learning environment upon the effectiveness of classroom teaching and learning. A primary goal of this course is to equip pre-service teachers with knowledge regarding how to create a better learning environment for their own future students, both inside and outside the classroom. This course also aims to acquaint students with the most recent developments in the research area of teaching and learning. Emphasis will be given to the application of this knowledge to pre-service teachers' professional work in the Hong Kong school context. Moreover, this course helps students to develop within themselves as well as among their future students, a variety of abilities, including, but not limited to, analytical, creative, and practical ones.

Assessment: 100% coursework.

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### **EDUC2002 Understanding and guiding whole-person development (6 credits)**

(Not to be taken with BBED4002)

This course reviews major theories, concepts and research on child and adolescent development and behaviour, and examines ways of guiding, counselling and supporting children and adolescents in their whole-person development in school settings. The course will address: (i) major theories of child and adolescent development; (ii) the interdependency of all aspects of development, i.e. physical, cognitive, academic, career and personal-social, and social relationships; (iii) basic concepts and

strategies in developmental, preventive and remedial guidance; (iv) the roles of teachers in student guidance and counselling; (v) and the application of counselling skills with students.

Assessment: 100% coursework.

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### **EDUC2005 Education and Curriculum: Values, Concepts and Issues (6 credits)**

This course introduces students to some of the issues and debates in education and, more specifically, curriculum, that are grounded in deeper philosophical questions and influenced by economic, political, social and cultural factors. Topics for discussion are considered in relation to their curricular implications, and are drawn from: the nature, aims and purposes of education; values and ethics in education in contemporary society; knowledge, teaching and learning; language, reasoning, rationality and critical thinking in education; and other educationally relevant concepts such as democracy, justice, equality, freedom, autonomy and community. The principal objective of the course is that students should develop a theoretical point of view informing their practice that is integrated, consistent, and morally and practically defensible.

Assessment: 100% coursework.

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### **EDUC8116 Mathematics learning with physical and virtual resources (key stage 1-2) (6 credits)**

This course will introduce basic theories in children's mathematical learning in the primary years with emphasis on the use of educational resources including traditional physical teaching and learning aids as well as latest technological tools. Through examination of these resources, the course will explore several central themes in mathematical thinking such as problem solving, reasoning, communication and developing mental imageries from multiple representations. There will be hands-on workshops for participants to explore and develop use of selected resources. The course will be suitable for anyone interested in teaching mathematics or understanding children's mathematical learning in the primary and early years.

Assessment: 100% coursework.

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### **EDUC8129 Teaching of junior secondary science (6 credits)**

The course aims to help participants to acquire and develop expertise as junior secondary school science teachers. It focuses on how best to promote and organize learning in schools. The mode of delivery and class activities includes lecturing, group discussion, individual work on project, practicals and experiments.

Assessment: 100% coursework.

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### **EDUC8130 Teaching of critical thinking in general studies (6 credits)**

This course aims at helping teachers to develop skills in teaching critical thinking through the broad based subject, General Studies, in an integrated and conceptual manner. By introducing the use of different teaching aids, such as graphic organizer, this course also encourages teachers to become reflective practitioners. In the first part of this course, we will explore some basic skills in classroom practice of teaching and learning in General Studies and its curriculum. In the second part, the class will examine more closely the General Studies curriculum in relation to critical thinking, and the role of General Studies in preparing young adolescents for their further studies.

Assessment: 100% coursework.

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### **EDUC8131 Effective teaching of science in the English medium (6 credits)**

This course aims to develop the course participants' understanding of the science academic language, the pedagogies to reinforce speaking, listening, reading and writing in science, assessment of/for learning science language, as well as the strategies to plan curriculum for students with different English language proficiency and facilitate their learning of science through the use of English. The mode of delivery and class activities include lecturing, group discussion and review of lesson video and school-focused task.

Assessment: 100% coursework.

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### **EXSC1001 Foundations of exercise science (6 credits)**

This course provides an introduction to exercise science as a field of study by providing an overview of (1) the sub-disciplines that provide the knowledge base for the discipline of exercise science and (2) the professions that depend on exercise science for their practice. Key biological themes related to adaptation and maturation will be used to exemplify the contributions that studies of the anatomical, mechanical, physiological, neural, and psychological and socio-cultural studies of human physical activity can make to human health and performance.

Assessment will be 60% coursework and 40% examination.

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### **EXSC1002 Physical activity and health (6 credits)**

This course investigates the role of physical activity in the maintenance of good physical health and avoidance of disease. The epidemiological evidence for physical inactivity as a causative factor in various lifestyle related disorders is introduced, and the use of physical activity and exercise as effective means of health management is investigated.

Assessment will be 100% coursework.

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### **EXSC1003 Kinetic anatomy (6 credits)**

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.

Assessment will be 30% coursework and 70% examination.

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### **EXSC1004 Physiology for human movement (6 credits)**

The course is designed to provide students with an understanding of the underlying physiological processes enabling human movement. Topics normally covered include nutrition and energy, skeletal muscle function, neural control of movement, cardiovascular function, respiratory function and endocrine function.

Assessment will be 20% coursework and 80% examination.

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### **EXSC2001 Fundamentals of motor control and learning (6 credits)**

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 and their application to health and exercise.  
Assessment will be 70% coursework and 30% examination.

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### **EXSC2002 Sport and exercise psychology (6 credits)**

The course will introduce students to both theoretical and applied aspects of psychological phenomena in sport and exercise. Students will consider a broad range of topics that are key in the field, including unidimensional and multidimensional theories of stress and anxiety in performance, motivation and goal setting, team cohesion, cognitive control strategies and aggression, coaching practice and expert/ novice differences. An introductory knowledge of psychology is highly recommended.

Assessment will be 100% coursework.

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### **EXSC2003 Exercise physiology (6 credits)**

This course provides an introduction to energy metabolism and the changes that occur in response to physical exercise. Emphasis is placed on the respiratory, cardiovascular and muscular systems, and the principles of exercise testing and prescription. Introductory level knowledge of physiology and biochemistry would be an advantage.

Assessment will be by 30% coursework and 70% examination.

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### **EXSC2004 Research design and analysis for exercise and health (6 credits)**

This course introduces students to the common research design and statistical methods used in exercise sciences. It also provides practical experience in describing and analyzing data using the statistical package for the social sciences (SPSS).

Assessment will be by 60% coursework and 40% examination.

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### **EXSC2005 Biomechanics (6 credits)**

Biomechanics is the area of exercise science concerned with the application of mechanics to the study of human movement. Biomechanics is traditionally divided into sub-areas of kinematics – the analysis of the movements of the body – and kinetics - the analysis of the forces associated with the movements of the body. This course offers an introduction to basic biomechanical principles and shows how these principles can be applied to the analysis of simple and more complex human movement.

Assessment will be 30% coursework and 70% examination.

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### **EXSC2006 Measurement of physical activity (6 credits)**

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 will be 80% coursework and 20% examination.

### **EXSC2007 Exercise prescription and training (6 credits)**

The course provides students with hands-on skills for fitness (wellness) coaching for a wide spectrum of athletes / clientele. The course will provide students with the skills to plan, design, instruct and monitor a proper training program (exercise prescription) for the client. Basic knowledge of human anatomy and exercise physiology are highly recommended. Assessment will be 60% coursework and 40% examination.

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### **EXSC3002 Advanced exercise physiology (6 credits)**

This course provides a more advanced understanding of the respiratory and cardiovascular adaptations to physical exercise; plus areas of applied work physiology (e.g. diving, altitude, thermoregulation, water balance and ergogenics). Assessment will be 40% coursework and 60% examination.

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### **EXSC3003 Advances in skill learning (6 credits)**

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 will be 100% coursework.

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### **EXSC3004 Physical activity and disability (6 credits)**

This course provides an overview of the relationship between physical/psycho-social health and physical activity in persons with disabilities. It also explores the current concepts and trends in adapted physical activity. Assessment will be 50% coursework and 50% examination.

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### **EXSC3005 Physical activity and diseases of inactivity (6 credits)**

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 will be 100% coursework.

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### **EXSC3006 Public health promotion of physical activity (6 credits)**

This course introduces the concepts and methods of using physical activity as a public health tool. The distribution of physical inactivity in the population will be discussed in context with the health of the population, and the evidence base for effective interventions will be reviewed. The course will also review how the evidence base informs national and international policy aimed at promoting physical activity. Assessment will be 70% coursework and 30% examination.



### **EXSC3007 Special topics in exercise sciences (6 credits)**

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 will be 100% coursework.

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### **EXSC3008 Recent advances in exercise and health (6 credits)**

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 and more detailed information about the specialism should be obtained from the Institute of Human Performance (IHP) Academic Office.

Assessment will be 100% coursework.

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### **EXSC3009 Current concepts in exercise and health (6 credits)**

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 analyses 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 will be 100% coursework.

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### **EXSC3010 Advanced measurement of physical activity (6 credits)**

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

Assessment will be 100% coursework.

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### **EXSC3011 Advanced exercise prescription and training (6 credits)**

The course is designed to complement PBSL2239 Exercise Prescription and Training and will build upon the basic knowledge with applied knowledge of optimal testing and measurements which guide exercise prescription strategies and the effective design of exercise training programmes for specific populations. At the end of the course students will be able to form an evidence-based opinion on exercise prescription and training and be aware of state-of-the-science developments in this area.

Assessment will be 60% coursework and 40% examination.

**EXSC3012 Applied anthropometry (6 credits)**

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 will be 70% coursework and 30% examination

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