#### BHRM 4065 Labour Relations and Law (3,3,0)

## Prerequisite: BHRM 2055 Human Resources Management or equivalent

This course aims to (1) introduce various theories of industrial relations and the dynamic relationships among the different actors constituting the industrial relations scene, and (2) cover employment legislation that is commonly used by HR professionals in an everyday situation. A practical and contemporary approach is taken, exposing the students to the full gambit of employee-management relations in the workplace.

#### BHRM 4075 Human Resources Research and (3,3,0) Measurement

#### Prerequisite: BHRM 2055 Human Resources Management or equivalent

This course is composed of two parts. The first part deals with Human Resources Research while the second one is on Human Resources Measurement. The first section examines problems and functions involved in designing, developing, and implementing or managing effective human resources programmes. It deals with topics as research questions, methods, designs, and analysis and interpretation of data. The second, smaller, section introduces to students the importance of measuring the economic value of employee performance and the techniques used in measuring the efficiency and productivity of a human resources department.

#### BHRM 4085 **Developing Managerial Skills**

### (3,3,0) Prerequisite: BHRM 3045 Business Communications or equivalent

The course prepares participants to handle critical issues in managerial communication and helps them master skills needed to achieve their potential as leaders and executives. The goal is to equip them with the personal, interpersonal and group skills needed to manage their own lives as well as relationships with others. The course teaches strategic approaches to managerial communications that can be applied to a variety of situations.

#### BHRM 4095 **BCom HRM Project** (3,0,\*)

The student project is a valuable integrative element in the BCom (Hons) in HRM curriculum, providing a focus for the application of knowledge acquired from core and major courses. The project provides an opportunity for students to apply the knowledge and skills gained on the degree programme to a real, practical business problem, and to prepare themselves for the transfer from the academic to the work situation.

#### BHRM 4155 Human Resources Strategy and (3,3,0) Planning

# Prerequisite: BHRM 2055 Human Resources Management or equivalent

This course is designed to consider the theories and role of human resources planning and link it to the policies and practice required for effective human resources management. This course examines internal and external environmental factors and trends that have crucial impacts on HR objectives and strategies in organisation. The role of human resources information system and the use of information technology in HRM and employee planning are also key issues to study in the course.

#### BHRM 4165 Human Resources Management (3,3,0) (P) in China

#### Prerequisite: BHRM 2055 Human Resources Management or equivalent

This course offers an advanced study of human resources policies and problems in mainland China. The aim of this course is to introduce to the students current and practical issues of HRM in mainland China. This course prepares HRM students (1) to make decisions on various HR policies such as compensation and benefits of local employees, management of out-of-province workers, and training and development of unskilled and illiterate workers; and (2) to give attention to getting Chinese workers and staff to accept responsibility, to exercise initiative, to emphasize quality, and to communicate readily across functions.

BIOL 1005 Introduction to Biology (3,3,0)This course is intended to train up students with broad background knowledge in biological sciences with emphasis on its relevance to human health and environmental science. Students will learn the main principles and mechanisms in biological and environmental sciences to get prepared for more in-depth studies in other courses in the BSc degree in Biology.

#### **BIOL 2005 Biological Chemistry**

Prerequisite: BIOL 1005 Introduction to Biology This course provides students with the fundamental knowledge of the building blocks of life forms as well as the major biochemical pathways that link up with carbohydrate, lipid, protein and nucleotide metabolisms. The significance of the biochemical pathways in relation to cellular and physiological phenomenon is also discussed.

#### BIOL 2006 Microbiology

(3,3,0)

Prerequisite: BIOL 1005 Introduction to Biology This course covers the basic principles of microbiology and selected aspects of applied microbiology. The learning materials will include microbial morphology, taxonomy and cultivation, and the roles of microorganisms in the ecosystem, pollution control process, causing disease and biotechnological industries. The objectives of this course are to stimulate the awareness of the vast diversity of microbes which are related to our daily living and equip students with the knowledge foundations for more advanced courses.

BIOL 2007 Microbiology Laboratory (1,0,3)The laboratory exercise provides a wide spectrum of microbiological techniques suitable for use in the study of microbiology. This course is designed to enhance, augment and reinforce the series of lecture and to provide students with the techniques to properly handle and study microorganisms.

# BIOL 2015 Biodiversity

(3,3,0)

Prerequisite: BIOL 1005 Introduction to Biology This course covers the diversity of plant and animal kingdoms. The part on plant covers the main characteristics of the major plant groups, their economic importance, distribution and morphology of representative genera. The animal part of the course presents a survey of the animal kingdom with emphasis on diversity and evolutionary relationships.

#### BIOL 2016 Biodiversity Laboratory (1.0.3)This practical course trains students to observe, characterize and

identify representatives of various plant and animal groups, with emphasis on local fauna and flora.

### BIOL 2017 Cell Biology Prerequisite: BIOL 1005 Introduction to Biology

(3,3,0)

To provide a general understanding of cellular functions and the ultra structures of eukaryotic and prokaryotic cells. To introduce basic research tools used by cell biologists to increase the knowledge of structure and function of cells, and also to prepare students to undertake advanced biological studies.

#### BIOL 2025 Cell Biology Laboratory (1,0,3)To expose students to the basic research tools in cell biology. To enhance the understanding of the theories covered in the BIOL 2017 Cell Biology course.

#### BIOL 2026 Genetics (3,3,0)

Prerequisite: BIOL 1005 Introduction to Biology

This course provides a general understanding of the structure, expression, regulation and mutation of genes. Various patterns and processes involved in the transmission of inheritable characteristics are introduced. Contributions of population genetics to the study of evolution, concepts of evolutionary genetics, and the recent hypothesis of molecular evolution are compared and discussed.

(3,3,0)

#### BIOL 2027 **Genetics Laboratory**

There are a series of experiments exposing students to basic tools and techniques used in the study of Genetics. Various organisms are used in the laboratory to enhance the understanding of genetic theories and principles.

(1,0,3)

(3,3,0)

#### 2035 BIOL Introduction to Environmental (3,3,0)Sciences

Prerequisite: BIOL 1005 Introduction to Biology

This course aims to introduce to students the scientific principles and issues in environmental sciences. It is a combination of scientific evidence and technical appraisals of processes and problems in relation to environmental quality. The topics selected will demonstrate how environmental issues are related to our everyday life. By showing how environmental and resource problems are interrelated, students should be able to understand the concepts and apply the principles to solve environmental and resource problems.

#### BIOL 2036 Global Environmental Leaderships (3.3.0)Prerequisite: BIOL 1005 Introduction to Biology and Biology Major Year II/III Standing (Environmental Science Concentration)

Environmental problems are highly complex and multi-facet by nature. As such, environmental education must be multidisciplinary in nature, in which science, socioeconomic factors and cultural perspectives must be considered. This course embraces a multidisciplinary approach, incorporating science, socio-economic and cultural dimensions, to nurture our next generation students as global environmental leaders to meet with the challenges presented to Hong Kong in the future.

#### BIOL 3005 Animal Physiology (3,3,0)

Prerequisite: Biology major Year III/IV standing

This course aims to provide students with the fundamental knowledge on the basic principles and the interrelation between the anatomical and functional organization of animal body. Regulatory mechanisms that cause the functional systems to operate in homeostasis are discussed. Throughout the course, emphasis is placed on human physiology. Comparative physiology of lower animals is also introduced. Students will come to understand the major physiological systems involved in the maintenance of body functions.

#### 3006 (1,0,3)BIOL Animal Physiology Laboratory

Prerequisite: Biology major Year III/IV standing This course provides students with practical experience of applying important physiological concepts in Animal Physiology. Some basic but important physiological concepts are illustrated by means of experiments. It also provides an opportunity for students to practise the methods and utilize the apparatus most frequently used in experimental physiology.

#### BIOL 3007 Ecology

Prerequisite: Biology major Year III/IV standing

This course places emphasis on biological functioning at the levels of population, community, and ecosystem, and is organized around the principles of energy flow and nutrient cycles. Human interventions such as urbanization, harvesting renewable and nonrenewable resources, and pollution generation are considered in relation to natural limits, natural regulations and regeneration mechanisms, and long-term ecosystem stability.

#### BIOL 3015 Ecology Laboratory (1,0,3)

Prerequisite: Biology major Year III/IV standing This course aims to use local ecological topics to facilitate the students' learning of modern methods of ecological research and environmental assessment, utilization of appropriate experimental techniques, collecting and interpreting data, and writing of ecological reports.

#### BIOL 3016 Environmental Health and (3,3,0) Toxicology

# Prerequisite: Biology major Year III/IV standing

The course provides the general knowledge on the various routes of human exposure to toxic chemicals. Main emphasis will be placed on the biological responses to toxicants, methods for evaluating potential toxicity and applications of toxicological data to assess potential health risk.

#### BIOL 3017 Molecular Biology (3,3,0)

Prerequisite: Biology major Year III/IV standing This course aims to provide a solid foundation in describing the molecular and cellular mechanisms in the maintenance and the regulation of the expression of the genome. Special attention will be given to the organization of eukaryotic genes, the flow of genetic information and the control of gene expression.

#### 3025 **Plant Physiology** BIOL

(3,3,0)

Prerequisite: Biology major Year III/IV standing This course deals with plant physiological processes such as plant-water relations, plant-environment interactions, mineral nutrition, carbon and nitrogen metabolism, and plant growth and development. Students are expected to use physiological principles to explain how plants control their growth and development under natural and agricultural environments.

#### Plant Physiology Laboratory BIOL 3026 (1,0,3) Prerequisite: Biology major Year III/IV standing

This laboratory session is designed to provide students with laboratory experience related to the materials covered in the lectures. Students will be exposed to basic techniques in investigating plant functions and data interpretation. Computerbased statistical analysis and graphical interpretation will be introduced.

#### BIOL 3027 Waste Treatment and Recycling (3,3,0) Prerequisite: Biology major Year III/IV standing

(1) Understand the origins of waste and the social, political and economic issues involved with waste disposal; (2) review the waste generation problem and to examine various physical, chemical and biological waste treatment methods; (3) introduce various technologies in reducing and reutilizing the various types of wastes; and (4) acquire a comprehensive knowledge of current and anticipated legislation regarding waste and their potential implications.

#### BIOL 3035 (3,3,0) Immunology

Prerequisite: Biology major Year III/IV standing This course is to provide basic concepts in the rapidly advancing field of Immunology, and to expose students to modern and current applications of Immunology in Cell Biology, Molecular Biology and Medical Sciences.

#### BIOL 3036 Neurobiology (3,3,0)

Prerequisite: Biology major Year III/IV standing

The course studies neurobiology with main emphasis on how neuronal information is integrated in the CNS to control bodily functions such as visual recognition, sleep, memory and movement. The course also studies the autonomic nervous system with an emphasis on its control of body functions. Lastly, the relationship between the nervous system and the hormonal system will also be stressed.

#### BIOL 3046 Foundation of Bioanalysis (3,3,0)

Prerequisites: BIOL 1005 Introduction to Biology

The course provides very strong foundation in the fundamental principles and theories for analysis of biological samples. Main emphasis will be focused on different biological aspects including cell biology, microbiology, biochemistry, molecular biology, physiology and immunology.

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# BIOL 3047 Foundation of Bioanalysis (1,0,3) Laboratory

Prerequisite: SCIE 1005 Integrated Science Laboratory Co-requisite: BIOL 3046 Foundation of Bioanalysis

The laboratory exercise provides a wide spectrum of bioanalytical techniques commonly used for the study of cell biology, microbiology, molecular biology, immunology and physiology. This course is designed to enhance, augment and reinforce the specific topics introduced during the lecture.

# BIOL 4005 Biotechnology Studies Laboratory I (2,0,6) Prerequisite: Biology major Year IV standing (Biotechnology Concentration)

The course is to introduce basic principles and current methods in biotechnology. The topics cover the basic technologies in molecular biology, enzymology and immunology.

# BIOL 4006 Environmental Science Laboratory I (2,0,6) Prerequisite: Biology major Year IV standing (Environmental Concentration)

This course provides students with hands-on experience in the approaches and techniques commonly used in environmental research. A local habitat will be selected and students will be trained to conduct sampling and analysis of various environmental matrices including water, soil and biola.

# BIOL 4007 Molecular Biotechnology (3,3,0)

Prerequisite: Biology major Year IV standing

This course aims to introduce to students with methods and techniques commonly used in molecular biological research and biotechnology, including current applications in microbial, plant, animal, and medical biotechnology.

# BIOL 4015 Fermentation and Enzyme (3,3,0) Technology

Prerequisite: Biology major Year IV standing

This course aims to introduce basic principles and current techniques in industrial microbiology and enzyme technology.

# BIOL 4016 Principles of Environmental (3,3,0) Management

Prerequisite: Biology major Year IV standing

This course aims to (1) discuss the anthropogenic causes of environmental degradation and the way sustainable growth can be brought about by environmental management; (2) examine the framework of environmental planning and management and the techniques for tackling environmental management; and (3) apply principles of environmental science to help manage some of the diverse array of environmental problems, in different physical, biological and social environments.

# BIOL 4017 Environmental Biotechnology (3,3,0)

Prerequisite: Biology major Year IV standing This course provides a general understanding of the principles and applications of biotechnology in environmental monitoring,

and applications of biotechnology in environmental monitoring, pollution control and contaminants removal. Special emphasis will be placed in biological wastewater treatment, bioremediation and ecological engineering.

# BIOL 4025 Biotechnology Studies Laboratory II (2,0,6) Prerequisite: Biology major Year IV standing (Biotechnology Concentration)

This course introduces basic principles and current methods in biotechnology. The topics cover various techniques currently in use in immunology, plant science, production of microbial products, neurobiology, and physiology.

# **BIOL 4026 Environmental Science Laboratory II (1,0,3)** Prerequisite: Biology major Year IV standing (Environmental Concentration)

This course aims to (1) provide students with training in analytical techniques, including physical, chemical and biological techniques, for environmental investigations; (2) provide students with the

skills in management and evaluation of environmental data; and (3) provide students with hands-on experience in management techniques for conducting and evaluating an environmental project.

# BIOL4027Developmental Biology(3,3,0)Prerequisite:BIOL 2017 Cell Biology, BIOL 2026 Genetics,<br/>BIOL 3017 Molecular Biology

This course aims to equip students with a solid foundation in principles of animal development, including embryogenesis, tissue formation and organogenesis, stem cell biology and tissue regeneration, and animal reproduction, and growth, cancer and aging. The course also challenges students to apply basic knowledge in cell biology, genetics, and molecular biology in understanding developmental processes.

# BIOL 4035 Biological Resources and (3,3,0) Management

Prerequisite: Biology major Year IV standing

This course is designed to promote an awareness of human beings' interaction with the abiotic and biotic environments through studying the principles of resource utilization and conservation that apply to biological systems. The course focuses on the management and rational exploitation of resources in terrestrial and aquatic ecosystems with particular emphasis on local and regional resources.

# BIOL4898-9Applied Biology Project I & II(3,0,9)Prerequisite:Biology major Year IV standing

This course aims to provide students with opportunities to conduct a literature survey or laboratory-based research on a specific biological question. Guidance will be provided to students in the development of an independent research plan and apply this plan to address the question.

# BIOL 7010 Advanced Topics in Biotechnology (3,3,0) Prerequisite: BSc (Hons) in Biology or with consent of instructor

This is a postgraduate course covering the principles and methods of biotechnology at an advanced level It aims at providing more in-depth studies of selected topics, such as production of recombinant proteins, toxicological study of drugs, application of immunological techniques in research, and new developments of modern biotechnology.

# BIOL 7020 Advanced Topics in Environmental (3,3,0) Sciences

Prerequisite: BSc (Hons) in Biology or with consent of instructor

This is a postgraduate course that provides update information in recent advance development in selected areas in environmental science and technology.

## BMKT 3005 Business and Marketing Research (3,3,0) Methods

This course provides students with the knowledge and skills needed to conduct business and marketing research. Students will gain a good understanding of the importance of research and have a broad overview of business and marketing research methods. Students will be equipped with the statistical tools and analytical skills to conduct business and marketing research projects.

Learning in this course will be accomplished through lectures, inclass exercises, group project and presentations.

(3,3,0)

# BMKT 3015 Consumer Behaviour

Prerequisite: MKTG 2005 Marketing Management The purpose of this course is to study the overall consumer decision-making process. Consumer decision determines the sales and profits of a firm; through the understanding of consumer behaviour, students are better equipped for more sophisticated marketing decision-making. Major areas covered are: the