

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) (E)

Prerequisite: Biology major Year IV standing

This course provides a general understanding of the principles 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.

BIOL 4027 Developmental Biology (3,3,0) (E)

Prerequisite: BIOL 3005 Animal Physiology, BIOL 3025 Plant Physiology, BIOL 3017 Molecular Biology and BIOL 4007 Molecular Biotechnology

This course aims to equip students with a solid foundation in principles of animal and plant development, including embryogenesis, tissue formation and organogenesis, stem cell biology and tissue regeneration, plant 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 Management (3,3,0) (E)

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.

BIOL 4898-9 Applied 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) (E)

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 Sciences (3,3,0) (E)

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.

BMS 1260 Medical Psychology (2,2,0)

This course aims at providing students with basic knowledge about the theories and concepts in medical psychology, developing their ability to apply psychological explanations to individual's daily social behaviour, and examining current psychological issues related to people in Hong Kong.

BMS 2440 Public Health and Family Medicine (2,2,0) (E)

Public health is the science and art of preventing disease, prolonging life and improving the health of communities through education, promotion of healthy lifestyles and research for disease and injury prevention. It deals with preventive rather than curative aspects of health; and with health issues at population-level rather than individual-level.

The objective of this course is to give students an overview of Public Health in the following aspects: (1) The principles of disease surveillance, biostatistics and epidemiology; (2) The incidence, prevalence and causes of common health problems in Hong Kong; (3) The clinical and preventive aspects of occupational health, environmental health, family health, mental health and health education; and (4) An overview of Hong Kong health services.

Family medicine is a medical specialty that provides continuing and comprehensive healthcare for individuals and families, including all ages, sexes, organ systems, and disease entities.

The objective of this course is to give students a general concept of Family Medicine in the following aspects: (1) Principles of Family medicine; (2) Common medical conditions encountered in family practice; (3) Care for women; (4) Pediatric and adolescent care; and (5) Geriatric care, especially those with chronic illnesses.

BMS 2450 Public Health and Family Medicine (3,3,0) (E)

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BMS 2510 Cardiovascular System (2.5,2.5,0)

In the modern era, cardiovascular disease contributes greatly to the burden of the healthcare system. In industrialized societies, it is the most frequent cause of adult death. It is important that students should be quite familiar with diseases affecting this system.

This course aims at offering students a general overview of the