

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

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 biota.

**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 Technology (3,3,0)**

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 Management (3,3,0)**

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, 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)**

Prerequisite: BIOL 2017 Cell Biology, BIOL 2026 Genetics, 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 Management (3,3,0)**

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)**

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)**

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 Methods (3,3,0)**

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, in-class exercises, group project and presentations.

**BMKT 3015 Consumer Behaviour (3,3,0)**

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