

**APSY 3820 Advanced Research Methods (3,3,0)**

Prerequisite: APSY 2150 Research Methods and Design in Psychology or equivalent

This course aims to introduce to students the design and data analytical techniques required for multivariate data analysis. The focus of the course will be on multiple regression, structural equation modelling, factor analysis, and item response analysis. The course is both theoretical and applied in nature. Students will also learn to input and analyse data using the SPSS and AMOS. This course serves to provide a foundation for future research at the Masters and PhD level.

**APSY 3830 Counselling Psychology (3,3,0)**

Prerequisite: APSY 2130 Personality Psychology or equivalent

This course aims to provide an overview of the counselling profession. Research in efficacy and assessment will be included based on the scientist-practitioner model. Students will be introduced to various professional settings to enable them to understand the mechanisms and strategies involved in counselling psychology.

**APSY 3890 Psychology in Applied Settings (3,0,3) (Practicum)**

This course aims to give students an opportunity to apply the psychological theories that they have learned to the different sectors of the community, such as business, education, and social services.

**APSY 3900-1 Honours Project I & II (6,0,6)**

Prerequisite: APSY 2150 Research Methods and Design in Psychology or equivalent

Students will work on a research project on an approved topic. Each individual project must include: a research question, a review of current literature, analysis of data, reporting of results, and discussion of the findings. The total length of the report should be between 9,000 and 15,000 words. Data collected for each research project are course to inspection and review.

**BIOL 1130 Biodiversity (3,3,0)**

Prerequisite: A-Level Biology

This course covers the diversity of plant and animal kingdoms. The plant part includes 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 1140 Biodiversity Laboratory (1,0,3)**

Co-requisite: BIOL 1130 Biodiversity

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 1160 Biological Chemistry (3,3,0)**

Prerequisite: A-Level Biology

This course provides students with fundamental knowledge of life's building blocks as well as the major biochemical pathways that link up with carbohydrate, lipid, protein and nucleotide metabolisms. The significance of the biochemical pathways in related to cellular and physiological phenomenon is discussed.

**BIOL 1210 Cell Biology (3,3,0)**

Prerequisite: A-Level Biology

This course provides a general understanding of cellular functions and the ultra structures of eukaryotic and prokaryotic cells and introduces 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 1240 Cell Biology Laboratory (1,0,3)**

Co-requisite: BIOL 1210 Cell Biology

This laboratory exercises exposes students to basic tools of research in cell biology, and enhances the understanding of the theories covered in the cell biology course.

**BIOL 1310 Microbiology (3,3,0)**

Prerequisite: A-Level Biology

This course covers the basic principles of microbiology as well as the 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 provide students a background for more advanced courses.

**BIOL 1320 Microbiology Laboratory (1,0,3)**

Co-requisite: BIOL 1310 Microbiology

The laboratory exercise provides a wide spectrum of microbiological techniques suitable for use in field of microbiology. This course is designed to enhance, augment and reinforce lecture series and to provide students techniques in proper handling and studying of micro-organisms.

**BIOL 1520 Biotechnology, Altering Nature, and Being Human (3,3,0)**

This course integrates knowledge in molecular biology and philosophy (including the religious perspectives). New biotechnology is a key part of the biological revolution in the 21st century, which makes news headlines from time to time. It includes assisted reproduction, genetic therapy, genetic engineering, cloning, and stem cell manipulation. It can modify our food and our environment, alter ourselves and our offspring. It offers high hopes and arouses deep fears at the same time. This course is divided into three parts. Part I: Biology—understanding the molecular biology behind the latest biotechnological advances (e.g. molecular cloning, stem cell, the Human Genome Project, regenerative medicine). Part II: From Biology to Philosophy—understanding the notions of “nature,” “altering nature,” “improving nature,” and “unnatural” from both the biological and philosophical perspectives. Part III: Philosophical Anthropology—exploring how we can set the moral guidelines so that, via biotechnological intervention of nature, human beings will neither play God nor play slave of nature, but just being human. This course begins with basic literacy in molecular biology and ends with the philosophical puzzle, “what is humanity?”

**BIOL 1620 You and Your Health (3,3,0)**

This course introduces the basics of life and living to non-biology major students. Topics chosen are closely related to health and diseases. Particular health problems of public interest will be selected for discussion.

**BIOL 1630 Environmental Principles and Ethics (3,3,0)**

This course understands fundamental environmental principles and ethics and to foster critical thinking in environment-related issues. Issues covered in the course will include resources management, food safety, public health, sustainable development, ecotourism, nature conservation and ecological footprint, as well as other current environment-related issues in Hong Kong and South China.

**BIOL 2110 Ecology (3,3,0)**

Prerequisite: BIOL 1130 Biodiversity and BIOL 1310 Microbiology (for Biology students)

This course emphasizes 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 non-renewable resources, and pollution generation are considered in relation to natural limits, natural regulations and regeneration mechanisms, and long-term ecosystem stability.